DESA™ INTERNATIONAL

# B-VENT DECORATIVE GAS FIREPLACE OWNER'S OPERATION AND INSTALLATION MANUAL

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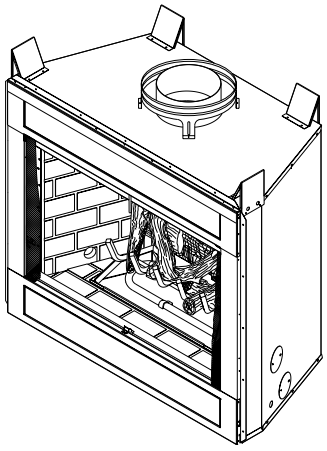

## MODELS M36(B,H), M42(B,H), VM36(B,H), AND VM42(B,H) NATURAL GAS

**WARNING: If the information in these instructions is not followed exactly, a fire or explosion may result causing property damage, personal injury or death.**

**FOR YOUR SAFETY**

- **Do not store or use gasoline or any other flammable vapors or liquids in the vicinity of this or any other appliance.**
- **WHAT TO DO IF YOU SMELL GAS :**
  - **Do not try to light any appliance.**
  - **Do not touch any electrical switch;**
  - **Do not use any phone in your building.**
  - **Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.**
  - **If you cannot reach your gas supplier, call the fire department.**
- **Installation and service must be performed by a qualified installer, service agency, or the gas supplier.**

**SAVE THIS BOOK**

This book is valuable. In addition to instructing you on how to install and maintain your appliance, it also contains information that will enable you to obtain replacement parts or optional accessory items when needed. Keep it with your other important papers.

**WARNING: Improper installation, adjustment, alteration, service or maintenance can cause injury or property damage. Refer to this manual. For assistance or additional information consult a qualified installer, service agency, or the gas supplier.**

**NOT FOR USE WITH SOLID FUEL**

**CHECK LOCAL CODES PRIOR TO INSTALLATION**

**MASSACHUSETTS STATE CODE REQUIRES THE VENT DAMPER TO BE WELDED OPEN OR REMOVED.**

**This appliance may be installed in an aftermarket* manufactured (mobile) home, where not prohibited by state or local codes.**

**This appliance is only for use with the type of gas indicated on the rating plate.**

**This appliance is not convertible for use with other gases, unless a certified kit is used.**

***Aftermarket: Completion of sale, not for purpose of resale, from the manufacturer.**

**Save this manual for future reference.** DESA

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# SAFETY INFORMATION

## ⚠ WARNINGS

**IMPORTANT: Read this owner's manual carefully and completely before trying to assemble, operate, or service this fireplace. Improper use of this fireplace can cause serious injury or death from burns, fire, explosions, electrical shock, and carbon monoxide poisoning.**

**⚠ DANGER: Carbon monoxide poisoning may lead to death!**

This fireplace is a vented product. This fireplace will not produce any gas leakage into your home if properly installed. This fireplace must be properly installed by a qualified service person. If this unit is not properly installed by a qualified service person, gas leakage can occur.

**Carbon Monoxide Poisoning:** Early signs of carbon monoxide poisoning resemble the flu, with headaches, dizziness, or nausea. If you have these signs, the fireplace may not have been installed properly. **Get fresh air at once!** Have fireplace inspected and serviced by a qualified service person. Some people are more affected by carbon monoxide than others. These include pregnant women, people with heart or lung disease or anemia, those under the influence of alcohol, and those at high altitudes.

Propane/LP gas and natural gas are both odorless. An odor-making agent is added to each of these gases. The odor helps you detect a gas leak. However, the odor added to these gases can fade. Gas may be present even though no odor exists.

Make certain you read and understand all warnings. Keep this manual for reference. It is your guide to safe and proper operation of this fireplace.

**⚠ WARNING: Any change to this fireplace or its controls can be dangerous.**

1. This appliance is only for use with the type of gas indicated on the rating plate. This appliance is not convertible for use with other gases unless a certified kit is used.
2. For propane/LP fireplace, do not place propane/LP supply tank(s) inside any structure. Locate propane/LP supply tank(s) outdoors. To prevent performance problems, do not use propane/LP fuel tank of less than 100 lbs. capacity.
3. If you smell gas
   - shut off gas supply
   - do not try to light any appliance
   - do not touch any electrical switch; do not use any phone in your building
   - immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions
   - if you cannot reach you gas supplier, call the fire department.
4. Never install the fireplace
   - in a recreational vehicle
   - where curtains, furniture, clothing, or other flammable objects are less than 42" from the front, top, or sides of the fireplace
   - in high traffic areas
   - in windy or drafty areas
5. This fireplace reaches high temperatures. Keep children and adults away from hot surfaces to avoid burns or clothing ignition. Fireplace will remain hot for a time after shutdown. Allow surfaces to cool before touching.
6. Carefully supervise young children when they are in the room with fireplace.
7. A hearth extension is not required with this appliance. If one is installed, it is for aesthetic purposes only and does not have to meet the standard requirements.

# SAFETY INFORMATION
## *Continued*

8. Turn fireplace off and let cool before servicing or repairing. Only a qualified service person should install, service, or repair this fireplace. Have fireplace inspected annually by a qualified service person.
9. You must keep control compartments, burners, and circulating air passages clean. More frequent cleaning may be needed due to excessive lint and dust from carpeting, bedding material, etc. Turn off the gas valve and pilot light before cleaning fireplace.
10. Have venting system inspected annually by a qualified service person. If needed, have venting system cleaned or repaired. See *Cleaning and Maintenance*, page 20.
11. Keep the area around your fireplace clear of combustible materials, gasoline, and other flammable vapor and liquids. Do not run fireplace where these are used or stored. Do not place items such as clothing or decorations on or around fireplace.
12. Do not use this fireplace to cook food or burn paper or other objects.
13. Do not use any solid fuels (wood, coal, paper, cardboard, etc.) in this fireplace. Use only the gas type indicated on fireplace nameplate.
14. This appliance, when installed, must be electrically grounded in accordance with local codes or, in the absence of local codes, with the *National Electrical Code, ANSI/NFPA 70*, or the *Canadian Electrical Code, CSA C22.1*.
15. Do not obstruct the flow of combustion and ventilation air in any way. Provide adequate clearances around air openings into the combustion chamber along with adequate accessibility clearance for servicing and proper operation.
16. Do not install fireplace directly on carpeting, vinyl tile, or any combustible material other than wood. The fireplace must set on a metal or wood panel extending the full width and depth of the fireplace.
17. Do not use fireplace if any part has been exposed to or under water. Immediately call a qualified service person to arrange for replacement of the unit.
18. Do not operate fireplace if any log is broken.
19. Do not use a blower insert, heat exchanger insert, or other accessory not approved for use with this fireplace.
20. Provide adequate clearances around air openings.

# UNPACKING

The following items are packed inside the firebox. Remove before positioning firebox into framing.

- Transition Collar - For vent connection
- Ceramic Log Pack - Shrink-wrapped on cardboard
- Three (3) plastic bags containing lava rock, pan and ember materials
- Rear Log - Remove the two plastic quick ties from around the burner and grate
- Grate Stand - Lift off of burner pan

Check all items for any shipping damage. If damaged, promptly inform dealer or distributor where you bought the product.

Safely retain these items for later installation.

# INTRODUCTION

Models M36(B,H), VM36(B,H), M42(B,H) and VM42(B,H) are vented gas fireplaces that use a millivolt gas control valve with a millivolt ignition system. A 6" B-Type venting system and a listed type vent cap are not supplied but are required for proper operation. See venting instructions on pages 9 and 10.

**⚠ WARNING: This gas appliance must not be connected to a chimney flue servicing a solid fuel burning appliance.**

Models M36(B,H), VM36(B,H), M42(B,H) and VM42(B,H) are factory equipped for use with natural gas and must be converted when intended for use with propane/LP gas. A respective model PCBM-36 or PCBM-42 conversion kit may be purchased for simple conversion to propane/LP gas. See *Accessories*, page 27.

## BEFORE YOU BEGIN

Before beginning the installation of your appliance, read these instructions through completely.

This DESA appliance and its approved components are safe when installed according to this installation manual and are operated as recommended by DESA. Unless you use DESA approved components tested for this appliance, **YOU MAY CAUSE A FIRE HAZARD!**

The DESA warranty will be voided by, and DESA disclaims any responsibility for the following actions :

A) Modification of the appliance or any of the components.

B) Use of any component part not approved by DESA in combination with this appliance.

C) Installation and/or operation in a manner other than instructed in this manual.

D) The burning of anything other than the type of gas approved for use in this gas appliance.

The installation must conform with local codes or, in the absence of local codes, with the current *National Fuel Gas Code, ANSI Z223.1/ NFPA 54* or with the current *CAN/CGA B149 Installation Codes*.

This appliance complies with *ANSI Z21.50-2000* and *CSA 2.22-2000 as Vented Gas Fireplaces* and is listed and tested by the *Canadian Standards Association* to the above test standards.

**⚠ WARNING: Installation of this appliance should be done by a qualified service person well trained in the installation of such appliances. You will also need a building permit from your local Building and Safety Commissioner before installing this appliance; otherwise your insurance co. may not cover this appliance.**

**NOTICE: This appliance is not intended to be used as a primary source of heat.**

**⚠ CAUTION: Do not connect appliance before pressure testing gas piping. Damage to gas valve may result and an unsafe condition may be caused.**

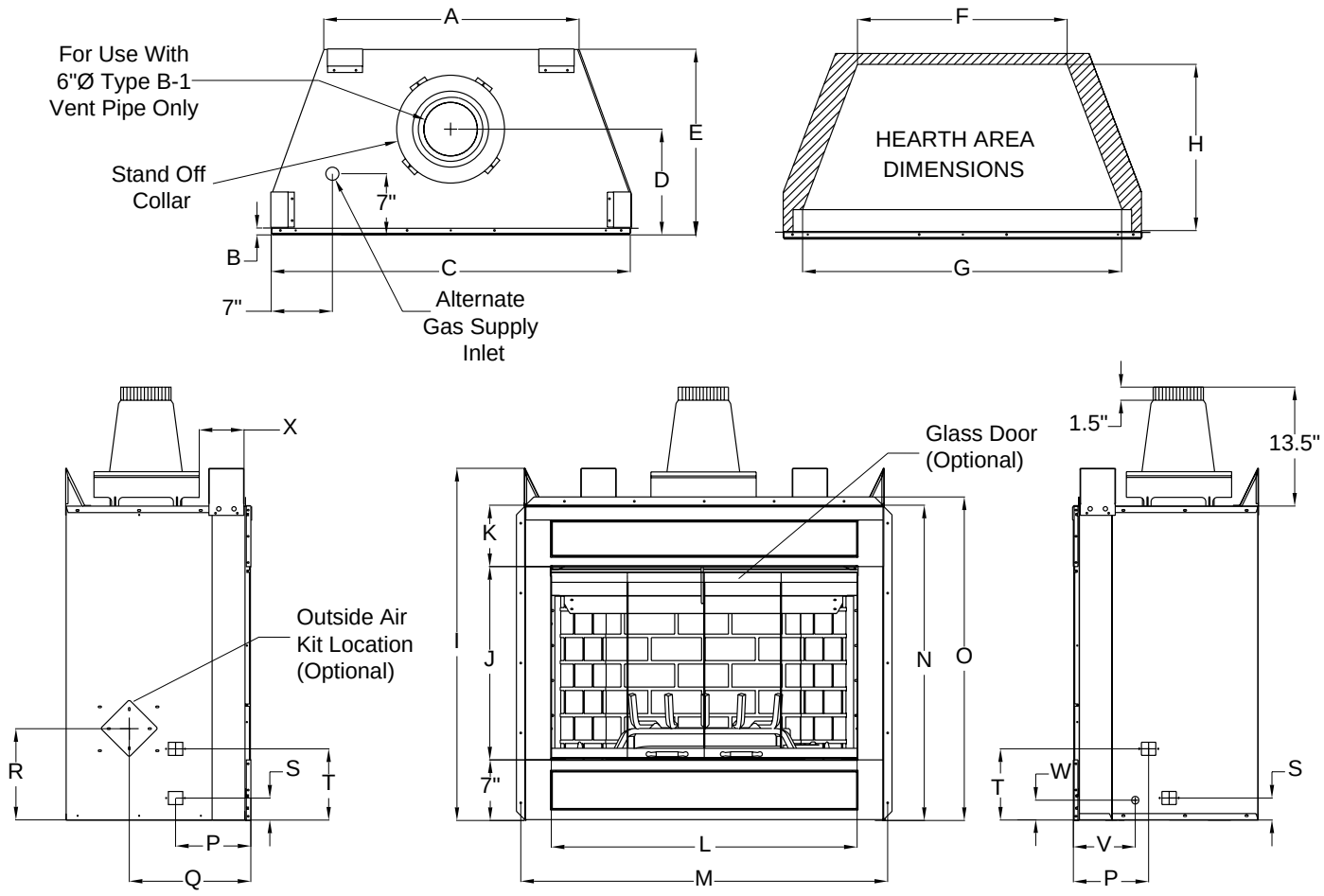
The appliance and it's individual shutoff valve must be disconnected from the gas supply piping system during any pressure testing of that system at test pressures in excess of 1/2 psig (3.5 kPa).

The appliance must be isolated from the gas supply piping system by closing its individual manual shutoff valve during any pressure testing of the gas supply piping system at test pressures equal to or less than 1/2 psig (3.5 kPa).

For the purpose of input adjustment two pressure taps (for IN and OUT pressures) are provided on the gas control valve for test gauge connections to the appliance.

| GAS RATING - NATURAL | | |
|---|---|---|
| | **M36(B,H)/VM36(B,H)** | **M42(B,H)/VM42(B,H)** |
| Max. Input Rating: | 40,000 Btu/Hr | 45,000 Btu/Hr |
| Manifold Pressure: | 3.5 in. WC (.87 kPa) | 3.5 in. WC (.87 kPa) |
| Minimum Supply Pressure: | 4.5 in. WC (1.12 kPa) | 4.5 in. WC (1.12 kPa) |
| Maximum Supply Pressure: | 10.5 in. WC (2.66 kPa) | 10.5 in. WC (2.66 kPa) |
| Orifice Size: | # 30 | # 29 |
| **GAS RATING - PROPANE/LP** | | |
| Max. Input Rating: | 40,000 Btu/Hr | 45,000 Btu/Hr |
| Manifold Pressure: | 10.0 in. WC (2.49 kPa) | 10.0 in. WC (2.49 kPa) |
| Minimum Supply Pressure: | 11.0 in. WC (2.74 kPa) | 11.0 in. WC (2.74 kPa) |
| Maximum Supply Pressure: | 13.0 in. WC (3.23 kPa) | 13.0 in. WC (3.23 kPa) |
| Orifice Size: | # 50 | # 47 |

# PRODUCT SPECIFICATIONS




| | Model 36 | Model 42 | | Model 36 | Model 42 |
|---|---|---|---|---|---|
| A | 29" | 36" | M | 42" | 49" |
| B | 5/8" | 5/8" | N | 36" | 40" |
| C | 41" | 48" | O | 37" | 41" |
| D | 12" | 14" | P | 8 5/8" | 10 1/2" |
| E | 21 1/4" | 23" | Q | 13 7/8" | 14" |
| F | 22 1/4" (24" w/o Brick) | 29 1/4" (31" w/o Brick) | R | 10 1/2" | 12 1/2" |
| G | 32 5/8" (34" w/o Brick) | 39 1/2" (41 1/4" w/o Brick) | S | 2 1/2" | 2 1/2" |
| H | 15 3/4" (16 3/4" w/o Brick) | 17 3/4" (18 3/4" w/o Brick) | T | 8 1/8" | 8 1/8" |
| I | 40 1/4" | 44 1/4" | U | 11" | 12 3/4" |
| J | 21" | 24" | V | 7" | 7" |
| K | 8" | 9" | W | 2 1/4" | 2 1/4" |
| L | 34 3/4" | 42" | X | 5" | 4 1/2" |

***Figure 1 - Appliance Dimensions***

# SELECTING LOCATION

To determine the safest and most efficient location for your appliance, you must take into consideration the following guidelines:

1. The location must allow for proper clearances (see *Clearances*, next column).
2. Consider a location where heat output would not be affected by drafts, air conditioning ducts, windows, or doors.
3. A location that avoids the cutting of joists or roof rafters will make installation easier. Figure 2 shows a plan view of a few common locations.

**Flush installations** are recommended where living space is limited or at a premium, and since the space required to enclose the appliance would be located beyond an outside wall, this would also reduce the cutting of joists, roof rafters, and such. Check local codes for any restrictions.

**Projected installations** can extend any distance into the room. A projection may be ideal for a new addition on an existing, finished wall.

**Corner installations** make use of space that may not normally be used and provides a wider and more efficient range for radiant heat transference.

**Internal wall installations** provide a discreet option for room separation and can also be ideal as an addition to an existing wall.

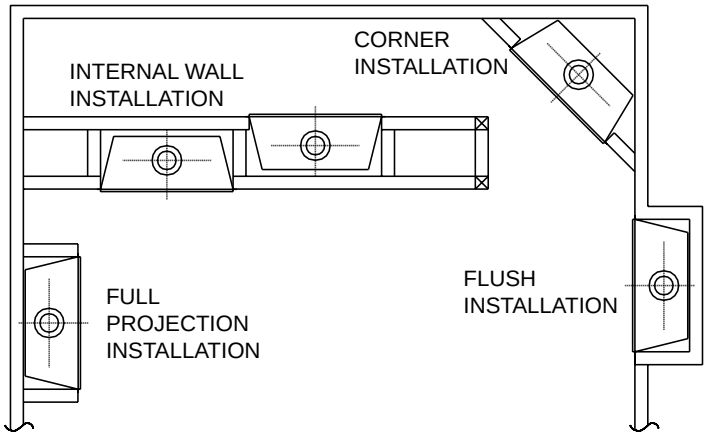



***Figure 2 - Possible Locations for Installing Appliance***

# PRE-INSTALLATION PREPARATION

## CLEARANCES

Minimum clearances to combustibles are:

- Back and Sides of Outer Surround ..... 0" min.
- Drywall to Sides of Front Face (Nailing Flanges) ... 0" min.
- "B" Vent Surfaces ..... 1" min.
- Ceiling to Opening ..... 42" min.
- Floor ..... 0" min.
- Perpendicular Wall ..... See Figure 6, page 7

**⚠ CAUTION: Do not block required air spaces with insulation or any other material. Do not obstruct effective opening of appliance with any type of facing material.**

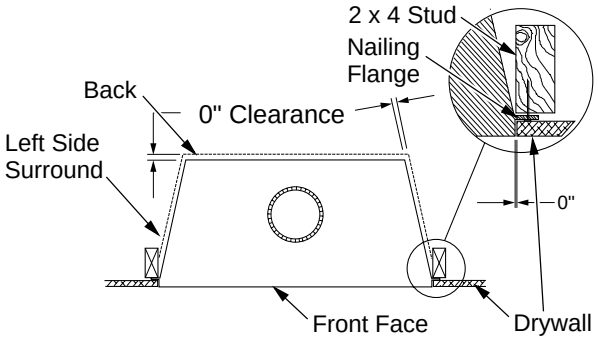



***Figure 3 - Minimum Clearances (Top View)***

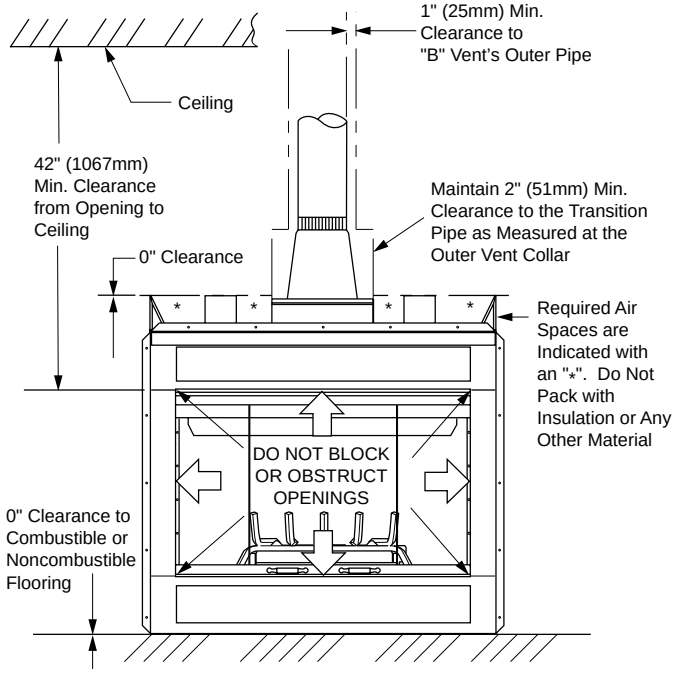


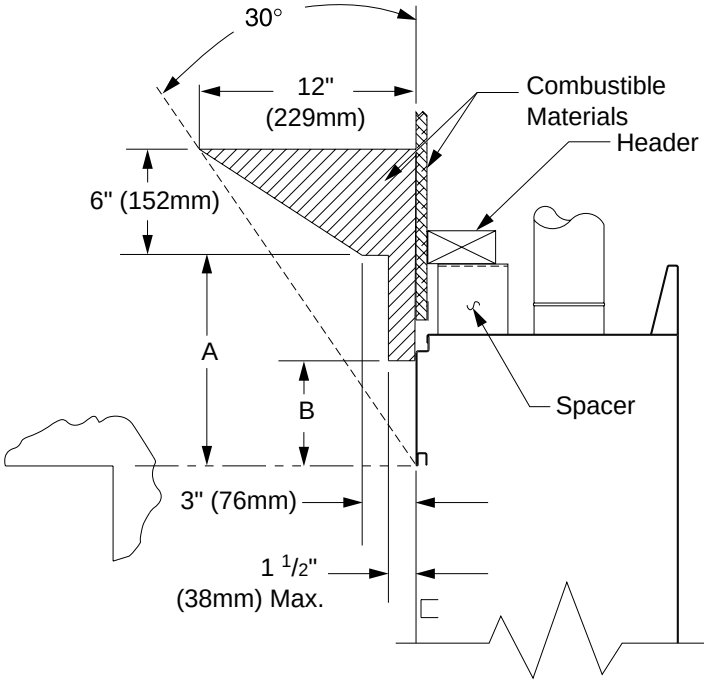

***Figure 4 - Minimum Clearances (Front View)***

# PRE-INSTALLATION PREPARATION

***Continued***

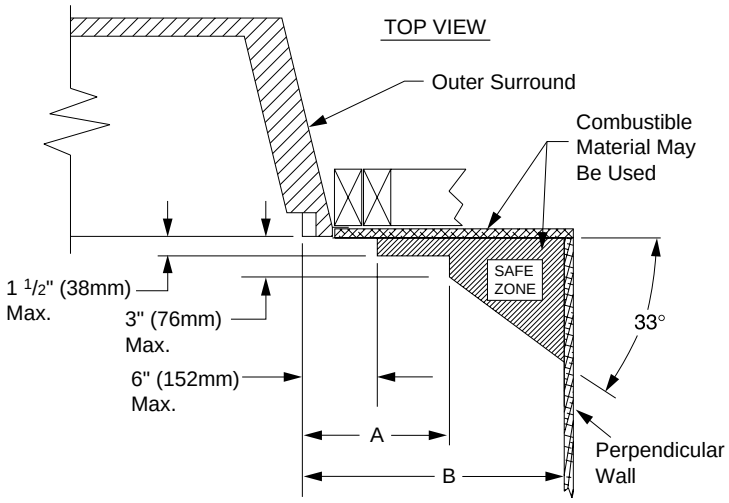
## MANTEL CLEARANCES AND WALL DETAILS

A combustible mantle shelf maybe installed a maximum 12" (229mm) from the wall. Figures 5 and 6 show the minimum allowable distances from various combustible mantle components in relation to the fireplace opening.




| | M36(B,H) VM36(B,H) | M42(B,H) VM42(B,H) |
|---|---|---|
| A | 14" (356mm) | 15" (381mm) |
| B | 8" (203mm) | 9" (229mm) |

***Figure 5 - Mantel Clearances - Side View (Cross Section)***




| | M36(B,H) VM36(B,H) | M42(B,H) VM42(B,H) |
|---|---|---|
| A | 9" (229mm) | 6" (152mm) |
| B | 12" (305mm) | 9" (229mm) |

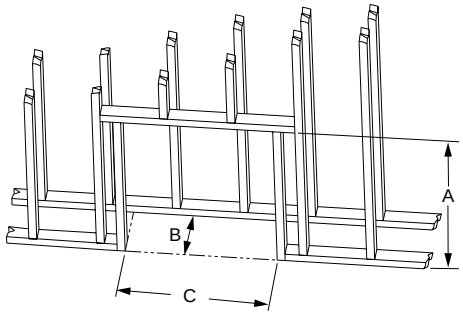
***Figure 6 - Side Clearances - Top View (Cross Section)***

# PRE-INSTALLATION PREPARATION
*Continued*

## FRAMING

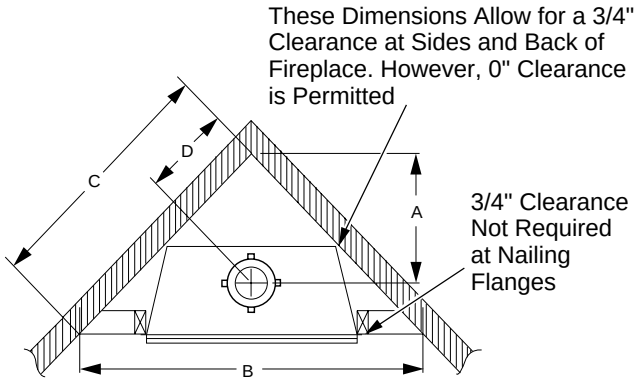
1. Frame appliance enclosure as illustrated in Figures 7 and 8.
   *Note:* If a wall covering is used to line the enclosure, then all measurements must be from the surface of the covering.
2. Place the appliance into the framing and secure it.
   *Note:* If appliance is to be raised above floor level, a platform must be built to support the appliance.
3. Install the supply line to the appliance using a 1/2" NPT black iron gas line terminating 2 5/16" above the bottom of the appliance. The gas line may be installed from either side or from the bottom of the appliance (see Figure 19, page 12).
4. Feed flexible gas line through one of three gas line conduit sleeve and repack insulation to cover any openings. Prepare the incoming gas line with teflon tape or pipe joint compound and hook-up incoming gas line to the flexible gas line.
   *Note:* If 1/2" NPT black iron pipe does not mate with fitting at the end of flexible gas line, remove fitting and replace with a 37 degree flare 3/4"-12, 1/2" NPT (female) fitting.

**⚠ WARNING: When finishing appliance, do not overlap combustible material onto the black front face. Brick, tile, or other noncombustible materials may be applied to the face provided that any gap is between the material used and the face is caulked with a noncombustible caulking.**




| | M36(B,H)/VM36(B,H) | M42(B,H)/VM42(B,H) |
|---|---|---|
| A | 40 3/8" (1020mm) | 44 3/8" (1121mm) |
| B | 21 3/8" (543mm) | 23 1/8" (587mm) |
| C | 41 1/4" (1048mm) | 48 1/4" (1226mm) |

***Figure 7 - Rough Opening for Installing in Wall***


These Dimensions Allow for a 3/4" Clearance at Sides and Back of Fireplace. However, 0" Clearance is Permitted
C
D
A
3/4" Clearance Not Required at Nailing Flanges
B

| | M36(B,H)/VM36(B,H) | M42(B,H)/VM42(B,H) |
|---|---|---|
| A | 24 1/2"(622.3mm) | 27 9/16"(700.1mm) |
| B | 73 7/8"(1876.4mm) | 83 7/8"(2130.4mm) |
| C | 52 3/16"(1326mm) | 59 5/16"(1506.6mm) |
| D | 17 1/4"(438.2mm) | 19 1/2"(495.3mm) |

***Figure 8 - Corner Installation Guidelines***

## INSTALLING TRANSITION PIPE AND STARTER COLLAR

The transition pipe and starter collar shown in Figure 9 are supplied with the fireplace, unattached and ready for installation. Remove the starter collar and set aside. Slide the transition pipe over the vent collar and attach with a minimum of three screws. Replace the starter collar over the transition pipe and attach using four screws located on the leg stands (five used on the model M42). To install B-vent piping, slide the first piece of B-vent over the transition pipe and attach with a minimum of two screws.

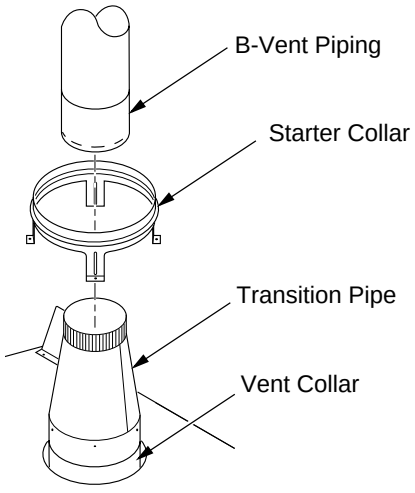



***Figure 9 - Installing Transition Pipe and Starter Collar***

# VENTING INSTALLATION

A B-type venting system must be connected to the appliance for venting to the outside of the building.

The following section is provided as a guide to a standard B-type vent installation.

Standing codes requirements concerning B-type vent installations may vary within your state, province or local codes jurisdiction. Therefore, it is recommended that you check with your local building codes for specific requirements or in absence of local codes, follow Section 7.0 of the current *National Fuel Gas Code ANSI Z223.1/NFPA 54* and in Canada with *CAN/CGA B149 for Category I systems using double wall B-1 vent pipe*.

This gas appliance must be vented to the outdoors only and may not be terminated into an attic space or into a chimney flue servicing a solid-fuel burning appliance.

This appliance may be vented through a manufactured chimney system or a masonry chimney using a B-vent adapter or a chimney liner system if all are listed, inspected and approved by local codes and/or building authorities.

The examples shown in Figure 10 are typical of most B-vent installations and codes practices.

*Example 1:* Shows the minimum allowable system height and lateral offset for a 60° degree or greater inclination. Code specifies that offsets at 60° degrees or greater are considered horizontal and must follow the 75% percent rule for lateral to total vertical system height. Codes also allows only one offset in the total system when at 60° degrees or greater. The total vertical height in this example represents the minimum height of 8 feet and therefore the allowable lateral is 6 feet when the 75% percent rule applies. If the lateral length must exceed 75% then the system must be sized in accordance with the Category I venting tables.

*Example 2:* Shows a multiple offset each at 45° degrees of inclination. Multiple offsets are permitted if they do not exceed 60° degrees of inclination. The total lengths of the two offsets are not required to meet the 75% percent allowable rule.

*Example 3:* Shows a single offset at 45° degrees of inclination and therefore the lateral length at 10 feet of offset does not have to meet the 75% percent rule.

In each case the offsets must be supported and firestops must be positioned wherever the vent must pass through a sub-floor, ceiling joist or an attic overhang. The vent pipe must terminate vertically into a listed type vent cap and extend a sufficient height through an approved roof flashing, roof jack or a roof thimble. At all points the listed clearances must be maintained.

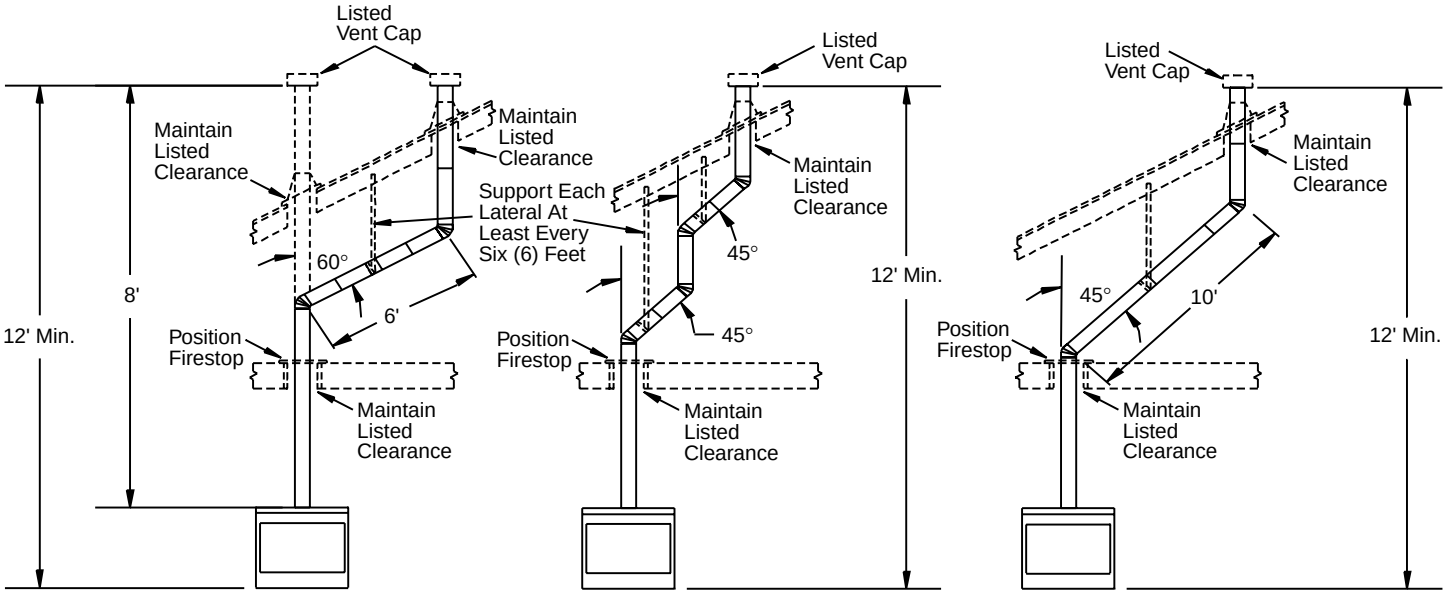



***Figure 10 - Typical B-Vent Configuration***

# VENTING INSTALLATION
*Continued*

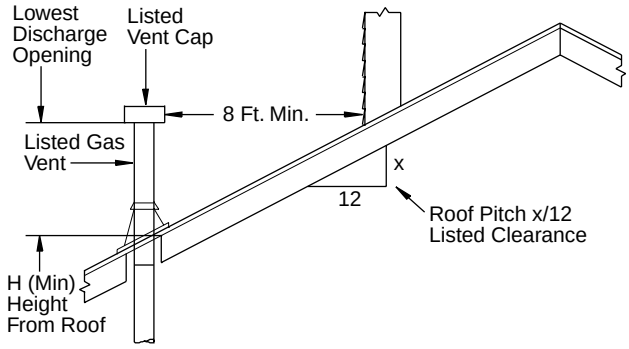
Vent terminations must be located in accordance with height and proximity rules of NFPA No. 54 or CAN/CGA B149. These rules apply to vents at 12 in. diameter or less and require a minimum height in accordance with the roof pitch and a minimum of 8 ft. distance from a vertical wall or obstruction (see Figure 11).

If venting horizontally through a side wall becomes necessary, a listed thimble approved for use with B-type vent must be used. Check with your local codes before venting through a side wall.

Some codes areas allow the use of existing B-type vent systems if the system is at or above the recommended diameter of the flue; in this case 6".

The flue connection must be made using listed B-type connectors and the existing system must be code inspected for damage and proper installation.

It is not recommended that this appliance be common vented with an existing gas burning appliance. However, if it becomes necessary to common vent this appliance, the venting system must be sized and configured in accordance with the common venting guides Appendix G of the current *National Fuel Gas Code ANSI Z223.1/ NFPA 54* and in Canada with *CAN/CGA B149*.




| Roof Pitch | H (Min.) Ft. | m |
|---|---|---|
| Flat to 6/12 | 1.0 | 0.30 |
| 6/12 to 7/12 | 1.25 | 0.38 |
| Over 7/12 to 8/12 | 1.5 | 0.46 |
| Over 8/12 to 9/12 | 2.0 | 0.61 |
| Over 9/12 to 10/12 | 2.5 | 0.76 |
| Over 10/12 to 11/12 | 3.25 | 0.99 |
| Over 11/12 to 12/12 | 4.0 | 1.22 |
| Over 12/12 to 14/12 | 5.0 | 1.52 |
| Over 14/12 to 16/12 | 6.0 | 1.83 |
| Over 16/12 to 18/12 | 7.0 | 2.13 |
| Over 18/12 to 20/12 | 7.5 | 2.27 |
| Over 20/12 to 21/12 | 8.0 | 2.44 |

***Figure 11 - B-Vent Terminations***

*Note:* Before connecting this appliance to an existing vent system or a common venting system consult with your local architect, planner, or building official.

**⚠ WARNING: This appliance must be properly connected to a system and must not be connected to a chimney flue servicing a separate solid fuel burning appliance.**

## CHECKING FOR PROPER VENTING

After completing and checking the electrical, gas and vent connections, follow the lighting instructions and allow the main burner to run for approximately 5 minutes. Hold a lighted match or cigarette near the top edge of the fireplace opening and play it along the entire length of the opening (see Figure 12). Proper venting should tend to draw the flame or smoke into the appliance. Improper venting or escaping of spillage of burned gas, is indicated when the match flickers or goes out. Smoke from a cigarette will also tend to disperse away from the appliance.

If the appliance is found to be improperly venting, shut it off and notify your installer or a qualified service agency to inspect the venting system.

**NOTICE: This appliance is equipped with a vent safety shutoff switch which will shut down the appliance in the case of a venting problem. Do not bypass the vent safety switch. If the appliance should shut down, contact a qualified installer, service agency, or your gas supplier to have the vent inspected before operating.**

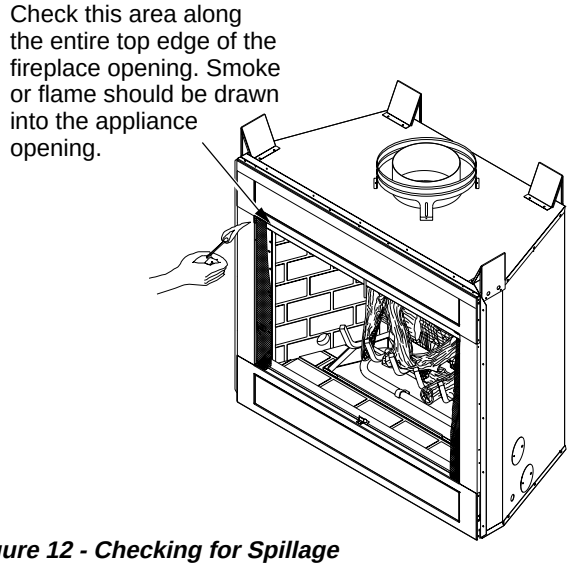

Check this area along the entire top edge of the fireplace opening. Smoke or flame should be drawn into the appliance opening.

***Figure 12 - Checking for Spillage***

# INSTALLATION

## WALL SWITCH INSTALLATION

The installation of a wall switch allows you to activate the gas control valve without the normal household electricity since the valve operates on millivolt current supplied by the heat generated by the thermopile. To install the wall switch:

1. Remove the front refractory access panel by lifting up and angling out of the firebox opening (see Figure 13).
2. Use wire and connectors provided. Attach red wire to terminal marked TH/TP on control valve. Attach white wire to blade connector on open end of safety circuit wiring (see *Wiring Diagram*, page 20).

*Note:* If any of the original wire from the unit control must be replaced, use the same type or a higher rated wire (25 ft. maximum length).

**⚠ WARNING: Do not wire remote wall switch to main power supply (Standard 120v household current).**

4. Locate wall switch in a convenient location.
5. After wire connections are complete, replace refractory access panel.

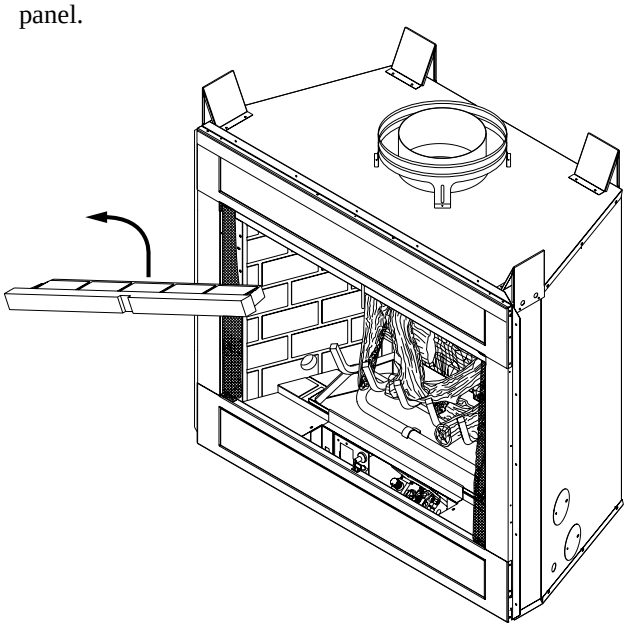


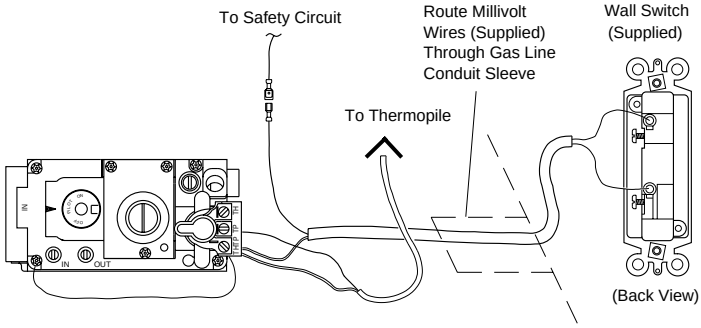
***Figure 13 - Removing Front Refractory Access Panel***

## OPTIONAL WIRELESS HAND-HELD REMOTE CONTROL INSTALLATION

*Note:* If using optional wireless hand-held remote control, the wall switch is no longer operational.

### Installing Receiver

1. Remove the front refractory access panel by lifting up and angling out of the firebox opening (see Figure 13) to expose controls.
2. Disconnect wall switch wires from TH and TH/TP terminals on control valve (see Figure 14).
3. Install remote receiver unit onto mounting bracket using the two plastic mounting clips (see Figure 15).




*Note:* If any of the original wire as supplied must be replaced, use 18 AWG TYPE CL2 (UL) 105 C (25 ft. length MAXIMUM) or equivalent.

***Figure 14 - Wall Switch Wiring Diagram***

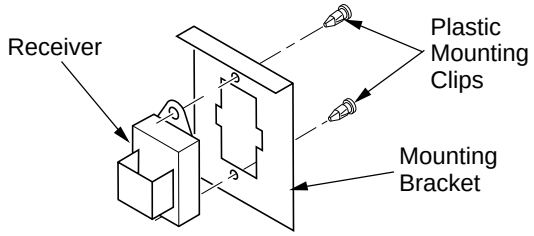



***Figure 15 - Installing Remote Receiver (Shown from Rear of Mounting Bracket)***

# INSTALLATION
*Continued*

4. Connect wires to control circuit. Connect white wire to terminal marked TH/TP on control valve. Connect red wire to male blade connector provided at open end of safety circuit wiring (see *Wiring Diagram*, page 20).
5. Locate the battery clip mounted on the back of the receiver (see Figure 16).
6. Slide 9-volt battery (not included) through the clip. *Note:* Only use alkaline battery.
7. Attach the terminal wires to the battery (see Figure 16).
8. Replace refractory brick access panel.

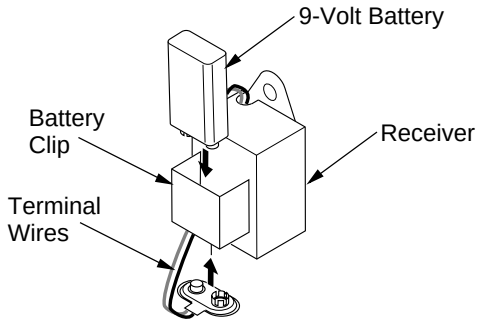



***Figure 16 - Installing Battery in Receiver***

### Installing 9-Volt Battery in Hand-Held Remote Control Unit

1. Remove battery cover on back of remote control unit.
2. Attach terminal wires to the battery (not included). Place battery into the battery housing. *Note:* Only use alkaline battery.
3. Replace battery cover onto remote control unit.

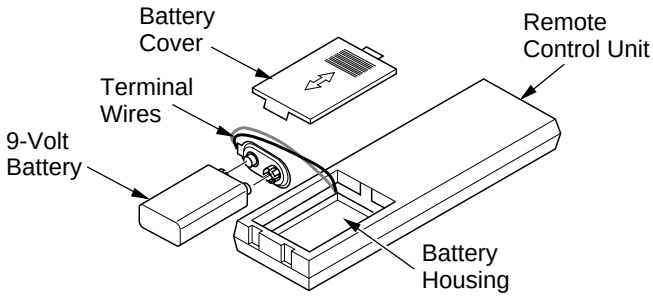



***Figure 17 - Installing Battery in Hand-Held Remote Control Unit***

## GAS LINE HOOK-UP

**⚠ WARNING: Gas line hookup should be done by your gas supplier or a qualified service person.**

**⚠ WARNING: Before you proceed, make sure your gas supply is OFF.**

A manual shutoff valve has been included in the appliance's gas supply system. You may consider installing an extra gas shutoff valve outside the appliance's enclosure (check with local codes) where it can be accessed more conveniently with a key through a wall as shown in Figure 18.

In conformance with local codes, route a 1/2" NPT gas line towards the appliance coming in from any of the 3 directions shown in Figure 19.

**⚠ CAUTION: Do not kink flexible gas line.**

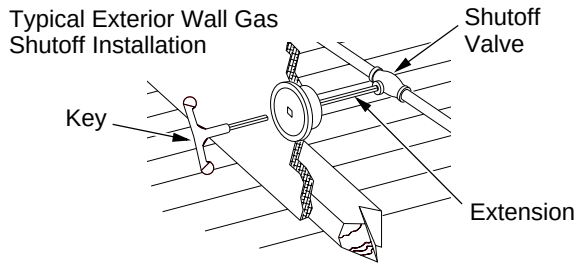
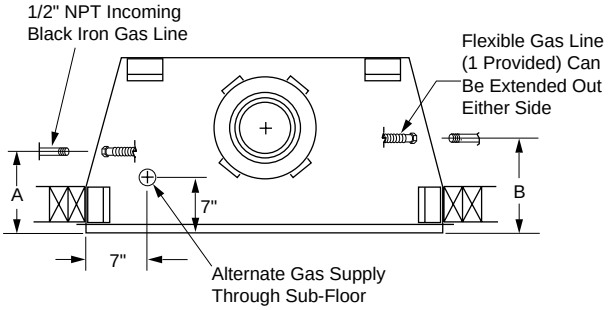



***Figure 18 - Manual Shutoff Valve Installation***




| | M36(B,H)/VM36(B,H) | M42(B,H)/VM42(B,H) |
|---|---|---|
| A | 8 5/8" (219mm) | 10 1/2" (267mm) |
| B | 11" (279mm) | 12 3/4" (324mm) |

***Figure 19 - Routing Incoming Gas Line***

# INSTALLATION
## *Continued*

DESA recommends that a black iron gas line be routed from the gas source, through a sediment trap (shown in Figure 20), and into the appliance, Once connected through the appliance, a flexible gas line may be used for ease of installation to gas control valve (see Figure 21).

Before connecting the black iron gas line to the inside of the appliance a sediment trap must be included outside the appliance between the gas line and the gas shutoff valve. It must extend down three (3) inches beyond the center of the pipe. Prepare incoming black iron gas line with teflon tape or pipe joint compound (Check with local building codes).

**⚠ CAUTION: Compounds used on threaded joints of gas piping shall be resistant to the action of Liquefied Petroleum (LP or propane), and should be applied lightly to ensure excess sealant does not enter the gas line.**

**⚠ WARNING: All gas piping and connections must be tested for leaks after the installation is completed.**

**After ensuring that the gas valve is on, apply a commercial leak detection solution to all connections and joints. If bubbles appear, leaks can be detected and corrected.**

**Do not use an open flame for leak testing and do not operate any appliance if a leak is detected.**

Complete your gas installation by connecting incoming gas line with flexible gas line. Secure tightly with wrench but **DO NOT OVERTIGHTEN.**

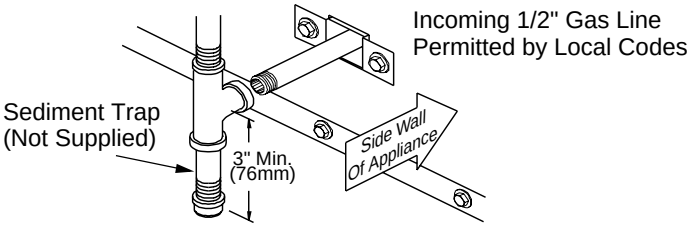



***Figure 20 - Sediment Trap***

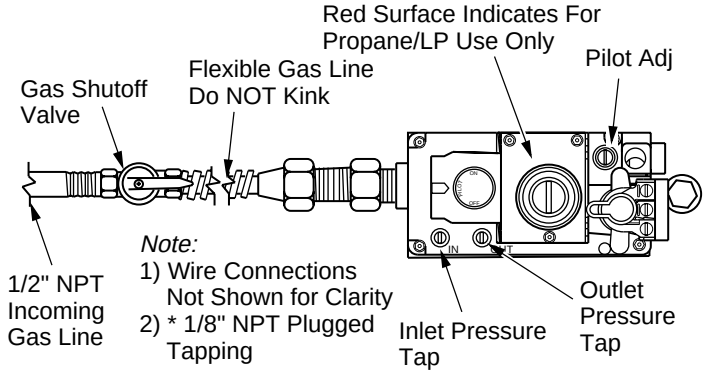



***Figure 21 - Connecting Flexible Gas Line to Millivolt Valve***

## EMBER AND PAN MATERIAL PLACEMENT

1. Open the bag(s) of vermiculite and fill the entire burner pan until the burner tube is completely covered (see Figure 22).
2. Smooth the pan material just even with edges of the burner pan.
3. Remove the ember material from the bag and flatten small amounts into quarter size pieces and lay on top of the surface of the pan material (see Figure 23).
4. Place just enough to cover the entire surface and leave about a 1/2 inch gap under the lower grate members to allow air to flow (see Figure 24).

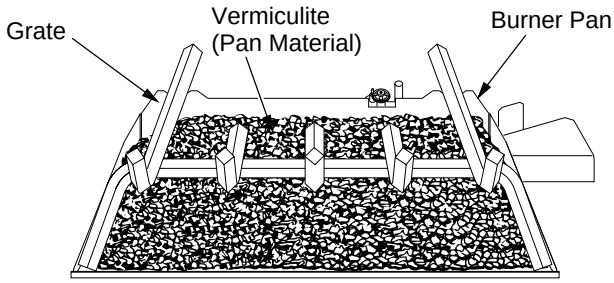



***Figure 22 - Fill Entire Burner Pan with Vermiculite***

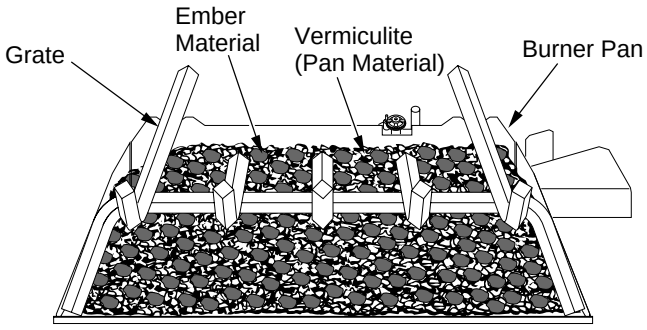



***Figure 23 - Ember Material on Surface of Pan Material (Vermiculite)***

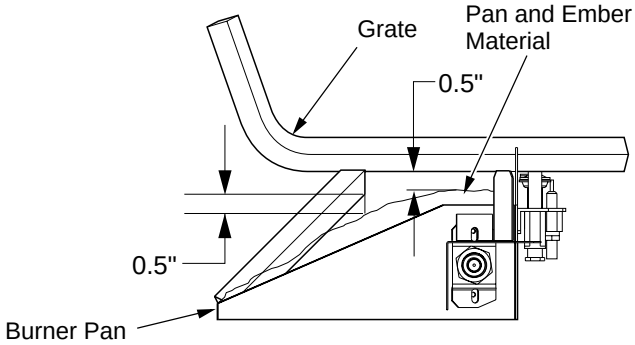



***Figure 24 - Pan and Ember Material Clearances***

# INSTALLATION

*Continued*

## LOG PLACEMENT FOR M36/VM36 MODELS

1. Place small front right log (log 1) on right front of grate as shown in Figure 25.
2. Place large back log (log 2) onto grate making sure notches rest over grate as shown in Figure 25.
3. Place log 3 across logs 1 and 2 aligning pegs on log 3 with holes in logs 1 and 2 (see Figure 26).
4. Place the top of log 4 across the right side of log 2, aligning peg in log 4 with hole in log 2 (Figure 26). Rest the front of log 4 on the grate as shown in Figure 27.
5. Align the peg at top of log 5 with the hole on the top left of log 2 (see Figure 27). Rest the bottom of log 5 on grate as shown in Figure 28.
6. Align peg at the top of log 6 with hole on the front left of log 2 (Figure 27). Rest the bottom of log 6 on grate as shown in Figure 28.

To enhance the look of the hearth you may optionally place the lava rock provided around the front and sides of the burner.

**NOTICE: Do not put lava rock inside the burner pan or around the air mixer fitting. Placing lava rock inside the burner pan or blocking the openings of the propane/LP air-mixer could cause performance problems.**

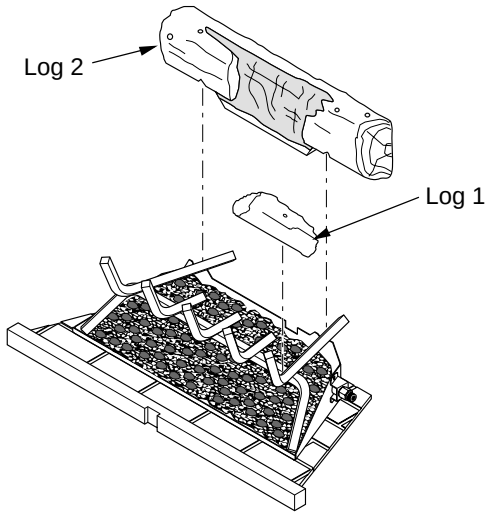



*Figure 25 - Installing Logs 1 and 2*

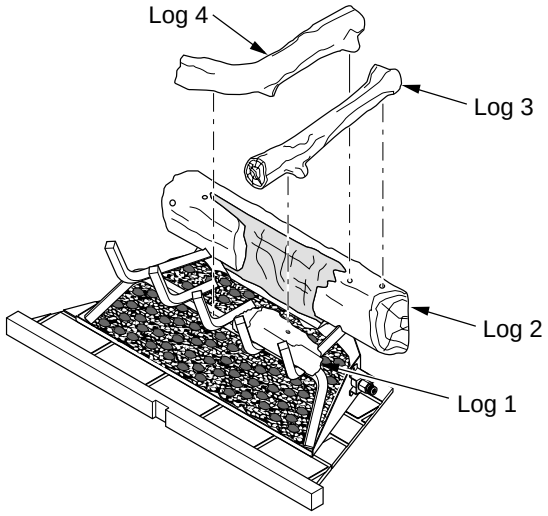



*Figure 26 - Installing Logs 3 and 4*

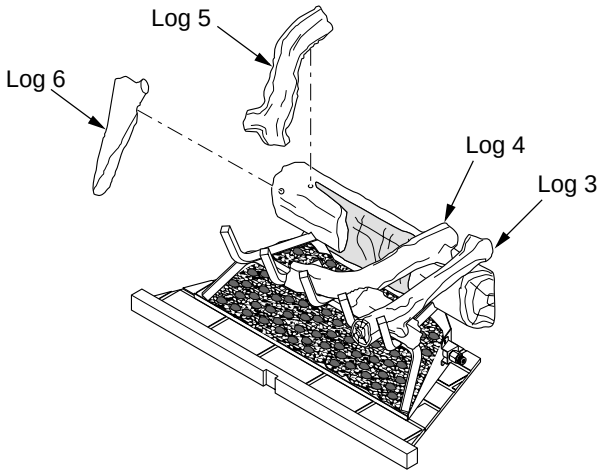



*Figure 27 - Installing Logs 5 and 6*

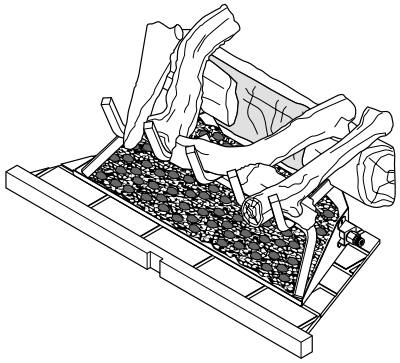


*Figure 28 - Logs Installed for M36/VM36 Models*

# INSTALLATION
***Continued***

## LOG PLACEMENT FOR M42/VM42 MODELS

1. Place log 1A on the front left side of grate. Place log 1B on the front right side of the grate. See Figure 29.
2. Place large back log (log 2) onto grate making sure notches rest over grate. Insert peg on back of log 1A into hole on front left of log 2 (see Figure 29).
3. Place log 3 across log 1A and log 2, aligning peg on log 3 with top left hole on log 2 (see Figure 30).
4. Align peg on log 4 with inside left hole on log 2 (see Figure 30). Log 4 will rest on grate fingers as shown in Figure 31.
5. Align peg on log 5 with the inside right hole on log 2 (see Figure 31). Rest the lower part of log 5 on the log 4 and on grate as shown in Figure 32.
6. Align peg at the top of log 6 with outside right hole on log 2. Fit the peg at the lower part of log 6 into the hole on top of log 1B (see Figures 31 and 32).

To enhance the look of the hearth you may optionally place the lava rock provided around the front and sides of the burner pan.

**NOTICE: Do not put lava rock inside the burner pan or around the air mixer fitting. Placing lava rock inside the burner pan or blocking the openings of the propane/LP air-mixer could cause performance problems.**

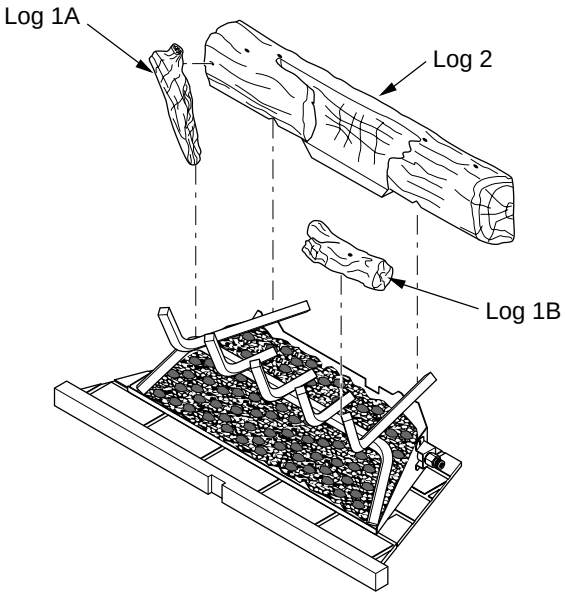



***Figure 29 - Installing Logs 1A, 1B and 2***

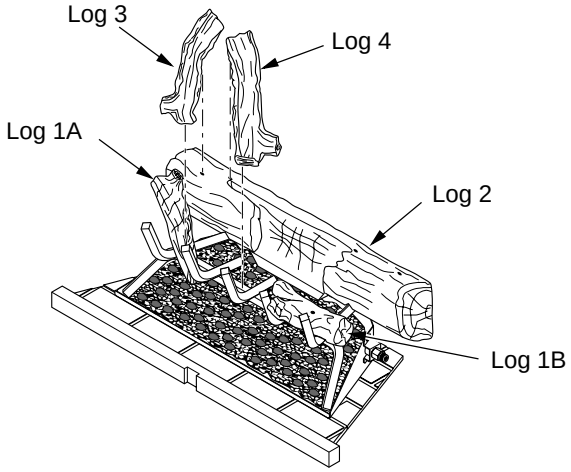



***Figure 30 - Installing Logs 3 and 4***

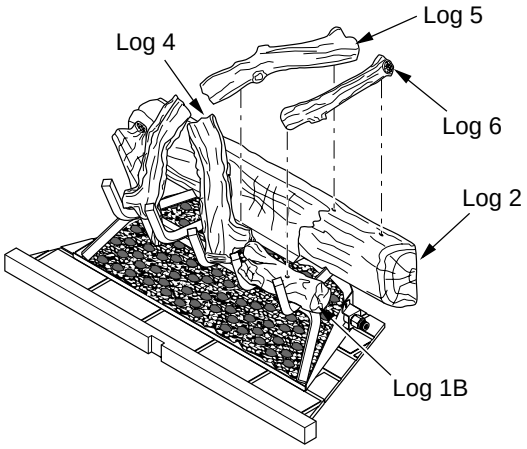



***Figure 31 - Installing Logs 5 and 6***

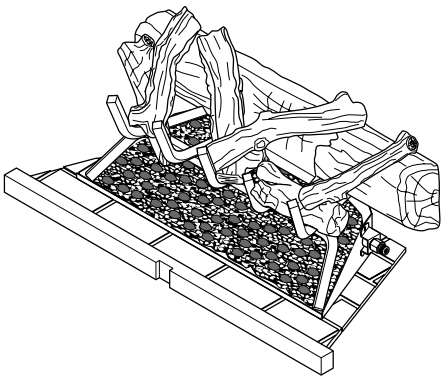


***Figure 32 - Logs Installed for M42 /VM42 Models***

# INSTALLATION

*Continued*

## COMBUSTION AIR KIT MODEL AK4 (OPTIONAL)

The outside air kit may be installed on the left side of the fireplace only. The vent can be installed through any outside wall a minimum of three feet below fireplace termination cap. The handle to operate the damper door for the outside air inlet will be located inside the left "screen pocket" of the firebox (see Figure 33). Pull the handle to open or push to close.

**⚠ CAUTION: Air inlet ducts are not to terminate in attic space.**

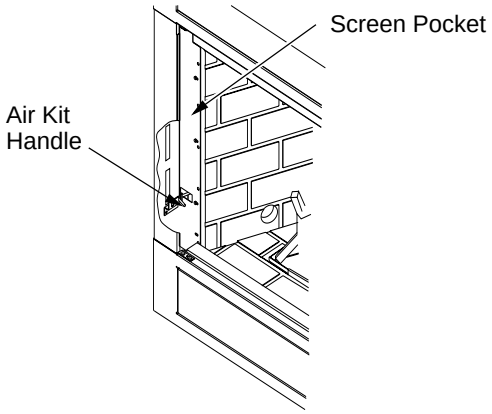



***Figure 33 - Air Kit Handle Location***

## APPLIANCE ENCLOSURE

Before finishing the enclosure around the appliance, inspect all joints around the outer surround. Any gaps between the nailing flanges and the framing should be sealed with noncombustible insulation or caulking.

If the appliance is mounted on a raised platform, it must be a continuous surface and not on blocks without a solid surface. This will prevent the entry of cold air by means of conduction through the total bottom of the appliance. (see Figure 34).

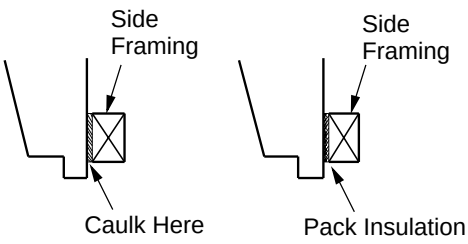



***Figure 34 - Sealing Between Appliance and Framing***

## INSTALLING OPTIONAL GLASS DOOR ACCESSORY

**⚠ CAUTION: Use only glass doors certified for use with this appliance.**

*Note:* Glass door may be heavy for some individuals. If this is the case, please request help from someone else.

The M36, VM36, M42 and VM42 B-vent fireplaces are approved for use with optional bi-fold glass doors (see *Accessories*, page 27). The glass panels may be ordered and installed anytime after the fireplace installation is complete.

Follow these steps to install left and right panels:

1. With the handle at the bottom, completely fold the panel on its hinges.
2. With the handle facing the center of the firebox opening, insert the lower pivot pin on the glass door panel into the hole in pivot plate on the bottom edge of the fireplace opening (see Figure 35).
3. Keeping the folded door tilted, slide the upper two pins into the guide track found under the upper facial edge of the firebox opening.
4. Tilt the glass assembly fully vertical until the outer pivot pin snaps into the mounting hole in the upper spring clip (see Figure 35).

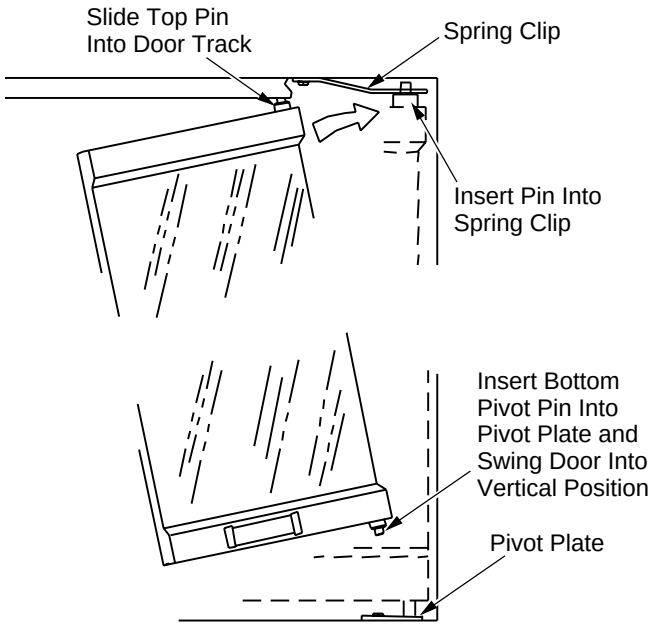



***Figure 35 - Installing Optional Glass Door***

# INSTALLATION
***Continued***

5. Once the top and bottom pins are secured, unfold the door into the closed position.
6. Repeat the process for the opposite door assembly.
7. To adjust the doors, slide them partially open. Using a screwdriver, loosen the hold-down screws in the spring clip (see Figure 36) and pivot plate.
8. Close both doors until evenly joined at the middle and note the gap at the outer edges of the face.
9. Reopen one door at a time and retighten the upper and lower hold-down screws.
10. Repeat the process until both doors are evenly joined, spaced and working freely.

**⚠ CAUTION: The glass panels become very hot while the appliance is operating. Do not attempt to adjust or clean the glass doors until the appliance has fully cooled.**

The doors may be removed for replacement or cleaning as follows:

1. Partially open the door and press up on the upper spring clip with a screw driver until the outer top pivot pin is free of the clip.
2. Fully fold the frame assembly and slide the upper edge towards the center of the firebox opening until the guide pins are free of the frame rail (see Figure 37).

**⚠ CAUTION: Always operate the appliance with the doors either fully opened or fully closed. Operating the appliance with the doors partially open can result in improper venting of flue products.**

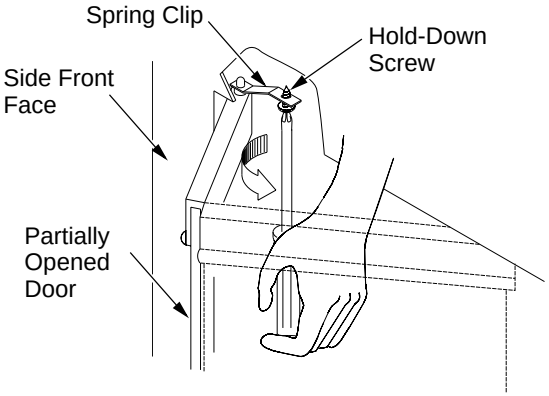



***Figure 36 - Adjusting Glass Doors***

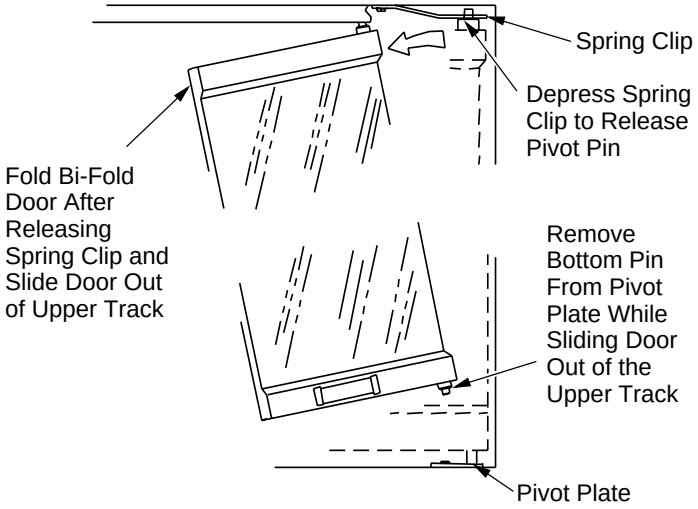

Spring Clip
Depress Spring Clip to Release Pivot Pin
Fold Bi-Fold Door After Releasing Spring Clip and Slide Door Out of Upper Track
Remove Bottom Pin From Pivot Plate While Sliding Door Out of the Upper Track
Pivot Plate

***Figure 37 - Removing Glass Doors***

## OPENING VENT DAMPER

Vent damper must be locked in the full open position before operating the fireplace. If vent damper is not open, fireplace will not light.

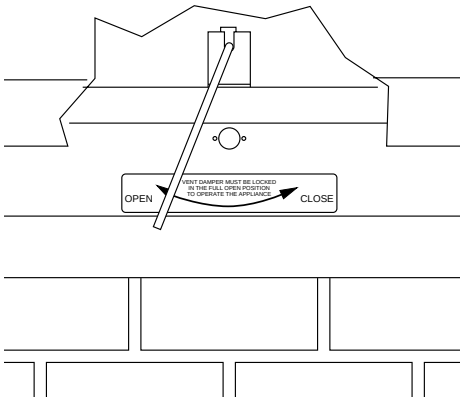



***Figure 38 - Opening Vent Damper***

# OPERATING FIREPLACE

## FOR YOUR SAFETY READ BEFORE LIGHTING

**⚠ WARNING: If you do not follow these instructions exactly, a fire or explosion may result causing property damage, personal injury or loss of life.**

**A. This appliance has a pilot which must be lighted by hand. When lighting the pilot, follow these instructions exactly.**

**B. BEFORE LIGHTING smell all around the appliance area for gas. Be sure to smell next to the floor because some gas is heavier than air and will settle on the floor.**

**WHAT TO DO IF YOU SMELL GAS**

- **Do not try to light any appliance.**
- **Do not touch any electric switch; do not use any phone in your building.**
- **Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.**
- **If you cannot reach your gas supplier, call the fire department.**

**C. Use only your hand to push in or turn the gas control knob. Never use tools. If the knob will not push in or turn by hand, don't try to repair it, call a qualified service technician or gas supplier. Force or attempted repair may result in a fire or explosion.**

**D. Do not use this appliance if any part has been under water. Immediately call a qualified service technician to inspect the appliance and to replace any part of the control system and any gas control which has been under water.**

## LIGHTING INSTRUCTIONS

**NOTICE: During initial operation of new heater, burning logs will give off a paper-burning smell. Orange flame will also be present. Open damper or window to vent smell. This will only last a few hours.**

1. **STOP! Read the safety information, above.**
2. **Turn wall switch to the OFF position.**
3. **Turn off all electric power to the appliance.**
4. **Fully open glass doors if installed.**
5. **Remove front refractory brick access panel.**
6. **Turn gas control knob clockwise ↷ to the OFF position (see Figure 39).**
7. **Wait five (5) minutes to clear out any gas. Then smell for gas, including near the floor. If you smell gas, STOP! Follow "B" in the safety information above. If you don't smell gas, go to the next step.**
8. **Turn control knob counterclockwise ↶ to the PILOT position.**
9. **Push in the knob all the way and hold in. Immediately light the pilot manually. Continue to hold the control knob in for about (1) minute after the pilot is lit. Release knob and it will pop back up. Pilot should remain lit. If it goes out, repeat steps 5 through 9.**
   - **If knob does not pop up when released, stop and immediately call your service technician or gas supplier.**
   - **If the pilot will not stay lit after several tries, turn the gas control knob to "OFF" and call your service technician or gas supplier.**
10. **Turn gas control knob counterclockwise ↶ to "ON". Knob can be turned to "ON" only if the control knob is popped out.**
11. **Replace front refractory brick access panel.**
12. **Fully close glass doors if installed.**
13. **Turn on all electric power to the appliance.**

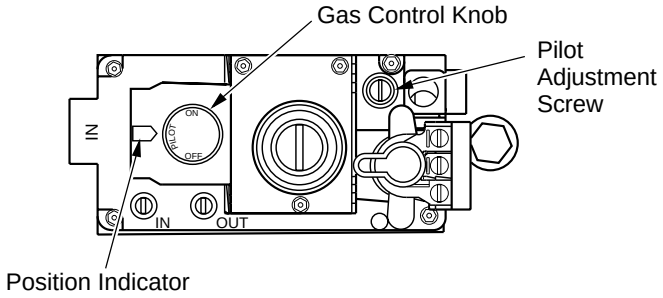



*Figure 39 - Control Knob in the PILOT position*

## TO TURN OFF GAS TO APPLIANCE

1. **Turn off the wall switch.**
2. **Turn off all electric power to the appliance if service is to be performed.**
3. **Fully open glass doors if installed.**
4. **Remove front hearth brick and control access panel.**
5. **Turn gas control knob clockwise ↷ to "OFF". Do not force.**
6. **Replace front refractory brick access panel.**
7. **Fully close glass doors if installed.**

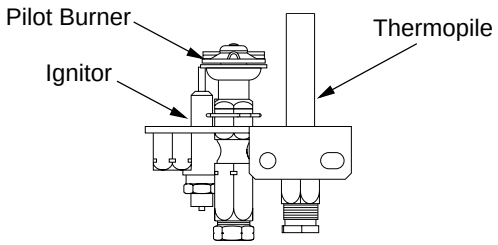



*Figure 40 - Pilot*

# OPERATING FIREPLACE
*Continued*

## OPTIONAL HAND-HELD REMOTE OPERATION

***Note:*** **The receiver and hand-held remote control kit must be purchased separately (see *Accessories,* page 27). Follow installation instructions on pages 11 and 12 of this manual.**

1. **After lighting, let pilot flame burn for about one minute. Turn control knob to ON position. Slide the selector switch to the REMOTE position. *Note:* The burner may light if hand-held remote ON button was on when selector switch was last turned off. You can now turn the burner on and off with the hand-held remote control unit.**

   ***IMPORTANT:*** **Do not leave the selector switch in the REMOTE position when the pilot is not lit. This will drain the battery.**

   ***IMPORTANT:*** **Be sure to press the ON/OFF buttons on the hand-held remote control unit for up to 3 seconds to assure proper operation.**
2. **Press the ON/OFF button to turn the burner on and off. When turning burner off, the pilot will remain lit.**

   ***IMPORTANT:*** **To turn the pilot off, manually turn the control knob on the heater to the OFF position.**

## TO TURN OFF GAS TO APPLIANCE

### Shutting Off Heater

**Press in and turn control knob clockwise ↷ to the OFF position.**

### Shutting Off Burner Only (pilot stays lit)

**Turn remote control wall switch to the OFF position.**

# INSPECTING BURNERS

Check pilot flame pattern and burner flame patterns often.

## PILOT ASSEMBLY

The pilot assembly is factory preset for the proper flame height. Alterations may have occurred during shipping and handling. The pilot is located on the back right hand side of the burner.

The height of the thermopile must be 3/8" to 1/2" above the pilot flame. The flame from the pilot burner must extend beyond the thermopile.

If your pilot assembly does not meet these requirements:

- Turn the adjustment screw marked pilot clockwise to decrease or counterclockwise to increase the flame to proper size (see Figure 39, page 18). Do not remove the adjustment screw.
- see *Troubleshooting*, pages 21 through 23

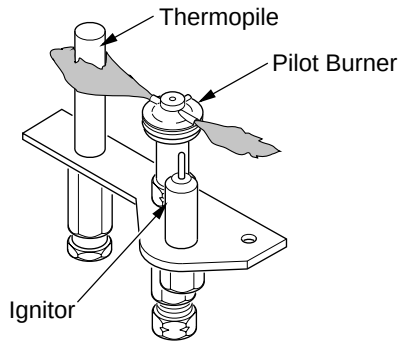



***Figure 41 - Correct Pilot Flame Pattern***

## BURNER FLAME PATTERN

Burner flames will be steady; not lifting or floating. Flames should go up through the middle of logset. Flames should not "spill" to the edges of the pan or sides of the logset.

Figure 42 shows a typical flame pattern. If burner flame pattern differs from that described:

- turn appliance off (see *To Turn Off Gas to Appliance*, column 1)
- see *Troubleshooting*, pages 21 through 23

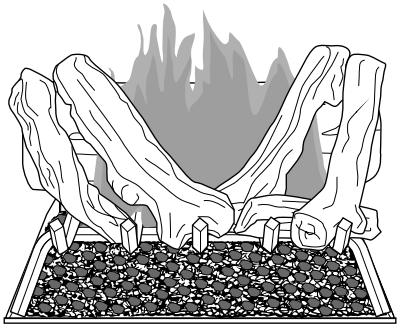


***Figure 42 - Typical Flame Pattern***

# CLEANING AND MAINTENANCE

**⚠ WARNING: Installation and repair should be done by a qualified service person. The appliance should be inspected before each use and at least annually by a qualified service person. More frequent cleaning may be required due to excessive lint from carpeting, bedding material, pet hair, etc. It is imperative that the control compartments, burners, and circulating air system be kept clean.**

**⚠ WARNING: The logs can be hot. Handle only when cool.**

**⚠ WARNING: Turn off gas and electrical power before servicing appliance.**

## PILOT AND BURNER

- Remove logs and ember material before cleaning burner and replace when cleaning is complete.
- Burner and controls should be cleaned with compressed air to remove dust, dirt, or lint.
- Use a vacuum cleaner or small, soft bristled brush to remove excess dust, dirt, or lint.

## LOGS

- If you remove logs for cleaning, refer to log placement information on pages 14 and 15 to properly replace logs.
- Use a vacuum cleaner to remove any carbon buildup on logs.
- Replace log(s) if broken. See *Replacement Parts*.
- Replace ember material periodically as needed. See *Replacement Parts*.

# SERVICE HINTS

### When Gas Pressure Is Too Low

- pilot will not stay lit
- burner will have delayed ignition
- fireplace will not produce specified heat
- propane/LP gas supply may be low if using propane/LP gas

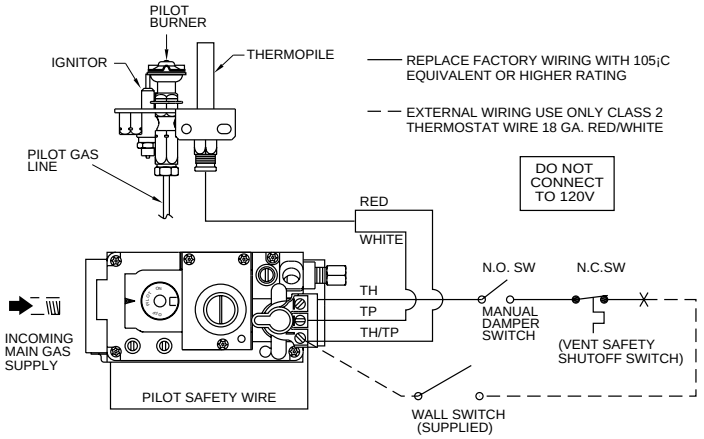
If using propane/LP gas, you may feel your gas pressure is too low. If so, contact your local propane/LP gas supplier.

# TECHNICAL SERVICE

You may have further questions about installation, operation, or troubleshooting. If so, contact DESA International's Technical Service Department at 1-866-672-6040. When calling please have your model and serial numbers of your heater ready.

You can also visit DESA International's Technical Services web site at **www.desatech.com.**

# WIRING DIAGRAM




# REPLACEMENT PARTS

*Note:* Use only original replacement parts. This will protect your warranty coverage for parts replaced under warranty.

## PARTS UNDER WARRANTY

Contact authorized dealers of this product. If they can't supply original replacement part(s) call DESA International's Technical Service Department at 1-866-672-6040 for referral information.

When calling DESA International, have ready

- your name
- your address
- model and serial numbers of your fireplace
- how fireplace was malfunctioning
- type of gas used (propane/LP or natural gas)
- purchase date

Usually, we will ask you to return the part to the factory.

## PARTS NOT UNDER WARRANTY

Contact authorized dealers of this product. If they can't supply original replacement part(s) call DESA International at 1-866-672-6040 for referral information.

When calling DESA International, have ready

- model number of your fireplace
- the replacement part number

# TROUBLESHOOTING

*Note:* For additional help, visit DESA International's Technical Service web site at **www.desatech.com**.

*Note:* Before troubleshooting the system, make sure the gas shutoff valve is ON.

The two most common causes of a malfunctioning gas appliance are:

1. Loose wiring connections
2. Construction debris clogging the pilot and/or gas control valve filter

| OBSERVED PROBLEM | POSSIBLE CAUSE | REMEDY |
|---|---|---|
| Pilot will not light | 1. No gas supply, or shutoff valve is OFF | 1. Check to see if you have gas supply |
| | 2. Air in gas line | 2. Hold regulator control valve in the PILOT position for 2 to 3 minutes to purge air. If you smell gas stop and wait for a few minutes before trying to light the fireplace |
| | 3. Construction debris clogging pilot orifice | 3. Remove debris and dirt, inspect and clean any other possible obstructions |
| | 4. Low gas pressure | 4. Contact your gas supplier |
| | 5. Control valve knob is not on the PILOT position | 5. Refer to section on pilot lighting |
| | 6. Kinked pilot line | 6. Have a qualified technician replace pilot line |
| | 7. Bad valve | 7. Replace regulator valve (see *Accessories*, page 27) |
| | 8. Vent damper not fully open | 8. Open vent damper until fully locked in OPEN position |
| Pilot will not stay lit | 1. Loose wiring on thermopile to regulator valve. No millivolt current is being sent back to regulator | 1. Check wiring connections. Refer to wiring diagram shown in *Wall Switch Installation*, page 11 |
| | 2. If valve knob and wall switch are in the ON position, probable defective regulator valve | 2. Have a qualified technician replace valve |
| | 3. Vent damper not fully open | 3. Open vent damper until fully locked in OPEN position |
| No gas to burner, although wall switch and valve are set to the ON position | 1. Wall switch wires defective or too long | 1. Check electrical connections |
| | 2. Thermopile not generating sufficient voltage | 2. See *Pilot will not stay lit*, above |
| Frequent pilot outage | 1. Pilot flame may be too low, causing safety pilot to "drop out" | 1. Clean and adjust pilot flame for maximum flame impingement on thermopile |
| | 2. Improper venting or excessive blockage | 2. Have the vent system inspected, including the termination cap. Remove any restriction or obstruction |

# TROUBLESHOOTING
*Continued*

| OBSERVED PROBLEM | POSSIBLE CAUSE | REMEDY |
|---|---|---|
| Pilot goes out when wall switch is ON | 1. Millivolt output on thermopile too high | 1. Replace thermopile |
| Spark ignitor will not light pilot after repeated triggering of red button | 1. Defective ignitor (no spark at electrode) | 1. Check for spark at the electrode and pilot; if no spark and electrode wire is properly connected, replace ignitor |
| | 2. Defective pilot or misaligned electrode at pilot (spark at electrode) | 2. Using a match, light pilot. If pilot lights, turn off pilot and trigger the red button again. If pilot lights, an improper gas/air mixture caused the improper lighting and a longer purge period is recommended. If pilot will not light, check gap at electrode and pilot. Gap should be 1/8" to have a strong spark. If okay, replace pilot |
| | 3. No gas or low gas pressure | 3. A) Check remote shut off valves from fireplace. Usually there is a valve near the fireplace and sometimes there is a valve near the main. There can be more than one (1) valve between the fireplace and main<br>B) Low pressure can be caused by a variety of situations such as bent line, too narrow diameter of pipe, or even low line pressure. Check for kinked lines. If none, consult with plumber or gas supplier |
| | 4. If using propane/LP gas, no propane/LP gas in tank | 4. Check propane/LP supply and contact local propane/LP supplier |

# TROUBLESHOOTING
*Continued*

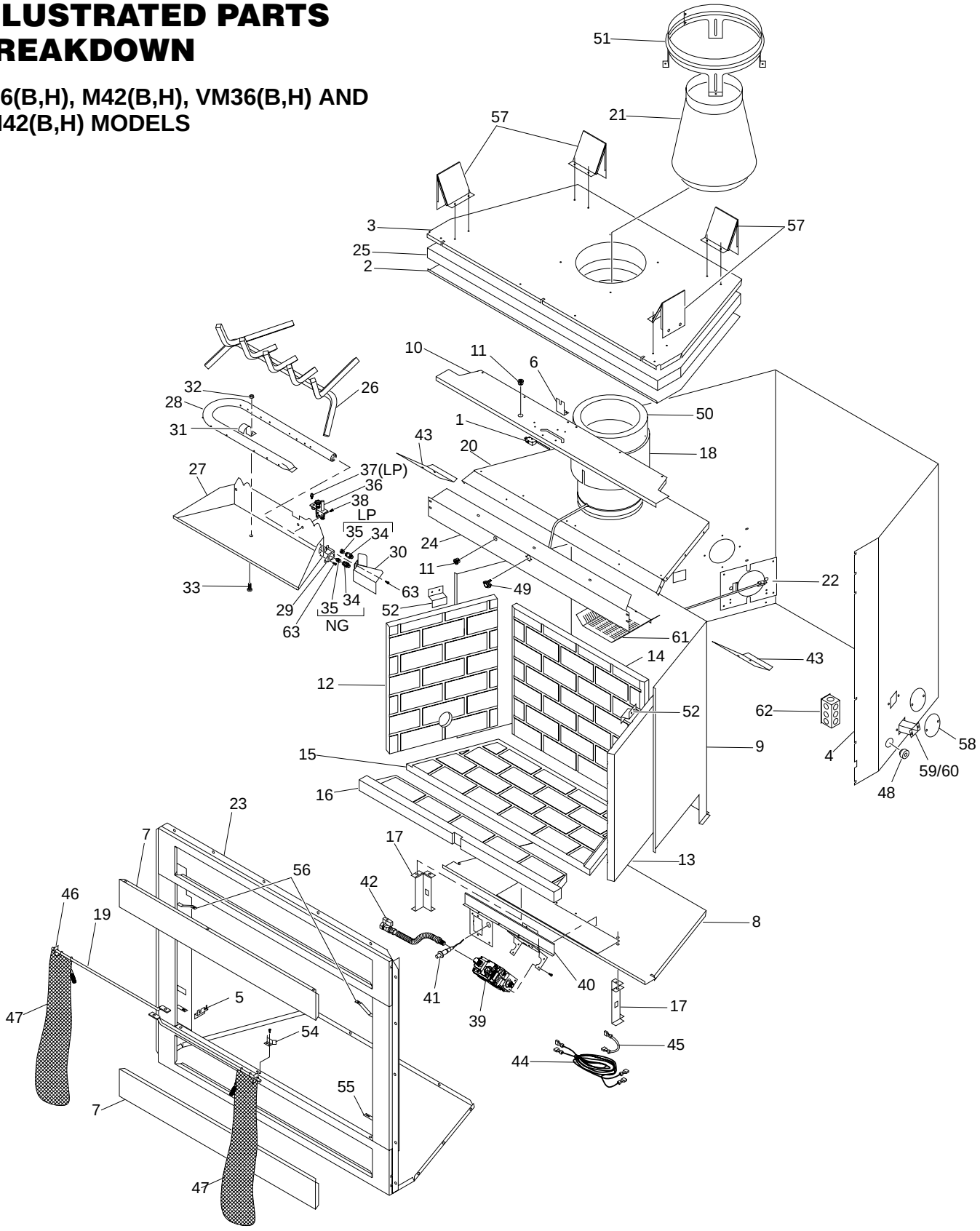
**⚠ WARNING: If you smell gas**
- **Shut off gas supply.**
- **Do not try to light any appliance.**
- **Do not touch any electrical switch; do not use any phone in your building.**
- **Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.**
- **If you cannot reach your gas supplier, call the fire department.**

*IMPORTANT:* Operating fireplace where impurities in air exist may create odors. Cleaning supplies, paint, paint remover, cigarette smoke, cements and glues, new carpet or textiles, etc., create fumes. These fumes may mix with combustion air and create odors.

| OBSERVED PROBLEM | POSSIBLE CAUSE | REMEDY |
|---|---|---|
| Fireplace produces a clicking/ticking noise just after burner is lit or shut off | 1. Metal expanding while heating or contracting while cooling | 1. This is common with most fireplaces. If noise is excessive, contact qualified service person |
| Fireplace produces unwanted odors | 1. Fireplace burning vapors from paint, hair spray, glues, etc. (See *IMPORTANT* statement above)<br>2. For propane/LP gas, low fuel supply<br>3. Gas leak. **See Warning statement at top of page** | 1. Ventilate room. Stop using odor causing products while fireplace is running<br>2. Contact local propane/LP supplier<br>3. Locate and correct all leaks (see *Gas Line Hook-Up*, pages 12 and 13) |
| Gas odor even when control knob is in OFF position | 1. Gas leak. **See Warning statement at top of page**<br>2. Control valve defective | 1. Locate and correct all leaks (see *Gas Line Hook-Up*, pages 12 and 13)<br>2. Replace control valve |
| Gas odor during combustion | 1. Foreign matter between control valve and burner<br>2. Gas leak. **See Warning statement at top of page** | 1. Take apart gas tubing and remove foreign matter<br>2. Locate and correct all leaks (see *Gas Line Hook-Up*, pages 12 and 13) |
| Dark residue on logs or inside of fireplace | 1. Improper log placement<br>2. Air holes at burner inlet blocked<br>3. Burner flame holes blocked<br>4. Improper venting or excessive blockage<br>5. Excessive amounts of embers and pan material | 1. Properly locate logs<br>2. Clean out air holes at burner inlets. Periodically repeat as needed<br>3. Remove blockage or replace burner<br>4. Have the vent system inspected, including the termination cap. Remove any restrictions or obstruction<br>5. Clear excess embers until a minimum gap of 1/2" remains under the grate |

# ILLUSTRATED PARTS BREAKDOWN

## M36(B,H), M42(B,H), VM36(B,H) AND VM42(B,H) MODELS



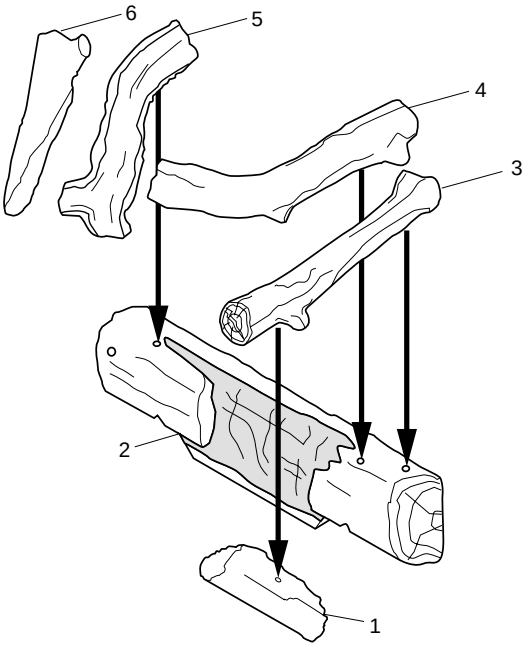
# PARTS LIST

This list contains replaceable parts used in your heater. When ordering parts, follow the instructions listed under *Replacement Parts* on page 20 of this manual.

| KEY NO. | M36(B,H) VM36(B,H) | M42(B,H) VM42(B,H) | DESCRIPTION | QTY. |
|---|---|---|---|---|
| 1 | 14574 | 106543-01 | Limit Switch | 1 |
| 2 | 106638-01 | 107797-01 | Insulation Pan | 1 |
| 3 | 106639-01 | 107798-01 | Fireplace Top Assembly | 1 |
| 4 | 106641-01 | 107800-01 | Fireplace Surround | 1 |
| 5 | 106642-01 | 106642-01 | Air Rod Retainer | 1 |
| 6 | 106643-01 | 106643-01 | Damper Rod Retainer | 1 |
| 7 | 106651-01 | 107805-01 | Panel Closure | 2 |
| 8 | 106655-01 | 107809-01 | Firebox Bottom | 1 |
| 9 | 106656-01 | 107810-01 | Firebox Surround | 1 |
| 10 | 106657-02 | 107811-02 | Air Separator | 1 |
| 11 | 11408 | 11408 | Bushing | 2 |
| 12 | 106658-02 | 107812-02 | Left Refractory, Std. Brick (M36B/M42B) | 1 |
| | 108164-02 | 108169-02 | Left Refractory, Herringbone (M36H/M42H) | 1 |
| | 106658-01 | 107812-01 | Left Refractory, Std. Brick (VM36B/VM42B) | 1 |
| | 108164-01 | 108169-01 | Left Refractory, Herringbone (VM36H/VM42H) | 1 |
| 13 | 106659-02 | 107814-02 | Right Refractory, Std. Brick (M36B/M42B) | 1 |
| | 108165-02 | 108170-02 | Right Refractory, Herringbone (M36H/M42H) | 1 |
| | 106659-01 | 107814-01 | Right Refractory, Std. Brick (VM36B/VM42B) | 1 |
| | 108165-01 | 108170-01 | Right Refractory, Herringbone (VM36H/VM42H) | 1 |
| 14 | 106660-02 | 107816-02 | Rear Refractory, Std. Brick (M36B/M42B) | 1 |
| | 108166-02 | 108171-02 | Rear Refractory, Herringbone (M36H/M42H) | 1 |
| | 106660-01 | 107816-01 | Rear Refractory, Std. Brick (VM36B/VM42B) | 1 |
| | 108166-01 | 108171-01 | Rear Refractory, Herringbone (VM36H/VM42H) | 1 |
| 15 | 106661-02 | 107818-02 | Bottom Rear Refractory, Std. Brick (M36/M42, M36B/M42B) | 1 |
| | 108167-02 | 108172-02 | Bottom Rear Refractory, Herringbone (M36H/M42H) | 1 |
| | 106661-01 | 107818-01 | Bottom Rear Refractory, Std. Brick (VM36/VM42, VM36B/VM42B) | 1 |
| | 108167-01 | 108172-01 | Bottom Rear Refractory, Herringbone (VM36H/VM42H) | 1 |
| 16 | 106662-02 | 107820-02 | Bottom Front Refractory, Std. Brick (M36/M42, M36B/M42B) | 1 |
| | 108168-02 | 108173-02 | Bottom Front Refractory, Herringbone (M36H/M42H) | 1 |
| | 106662-01 | 107820-01 | Bottom Front Refractory, Std. Brick (VM36/VM42, VM36B/VM42B) | 1 |
| | 108168-01 | 108173-01 | Bottom Front Refractory, Herringbone (VM36H/VM42H) | 1 |
| 17 | 106683-01 | 106683-01 | Firebox Support Leg | 2 |
| 18 | 106687-01 | 106887-02 | Damper Can Collar | 1 |
| 19 | 106691-01 | 107839-01 | Screen Rod | 2 |
| 20 | 106694-03 | 106694-04 | Firebox Top Assembly | 1 |
| 21 | 106699-01 | 106699-02 | Transition 6" B-Vent Collar | 1 |
| 22 | 106703-01 | 106703-01 | Air Kit Door Assembly | 1 |
| 23 | 106704-01 | 107822-01 | Firebox Face | 1 |
| 24 | 106948-02 | 107823-02 | Smoke Deflector | 1 |
| 25 | 107768-01 | 107824-01 | Fireplace Top Insulation | 1 |
| 26 | 107796-01 | 107796-02 | Grate Assembly | 1 |
| 27 | 107742-01 | 107742-02 | Burner Pan | 1 |
| 28 | 107795-01 | 107831-01 | Burner Tube | 1 |
| 29 | 107748-01 | 107748-01 | Burner Bracket | 1 |
| 30 | 107985-01 | 107985-02 | Pilot Shield | 1 |
| 31 | 901681-01 | 901681-01 | Burner Clamp | 1 |
| 32 | 11209 | 11209 | Nut, #10-24 | 1 |
| 33 | 11147 | 11147 | Screw, #10-24x1/2 | 1 |
| 34 | 901066-01 | 901066-01 | Brass Air Mixer (NG) | 1 |
| | 901066-02 | 901066-02 | Brass Air Mixer (LP) | 1 |
| 35 | 901064-03 | 901064-08 | Orifice (NG) | 1 |
| | 901065-08 | 901065-07 | Orifice (LP) | 1 |
| 36 | 108084-01 | 108084-01 | Pilot - Natural Gas | 1 |
| 37 | 108085-01 | 108085-01 | Pilot Orifice (LP) | 1 |
| 38 | 11102 | 11102 | Screw, #8-32x3/8 | 2 |
| 39 | 14512 | 14512 | Gas Control Valve (NG) | 1 |
| | 14513 | 14513 | Gas Control Valve (LP) | 1 |
| 40 | 107741-01 | 107741-01 | Valve Bracket | 1 |
| 41 | 14261 | 14261 | Piezo Ignitor | 1 |
| 42 | 14253 | 14253 | Manual Valve with Flex Hose | 1 |
| 43 | 108769-01 | 108769-02 | Extension Deflector | 2 |
| 44 | 108005-01 | 108005-01 | Wire Harness | 1 |
| 45 | 108005-02 | 108005-02 | Wire Harness | 1 |
| 46 | 11418 | 11418 | Push-On Nut | 2 |
| 47 | 12105 | 107840-01 | Screen | 2 |
| 48 | 14123 | 14123 | Strain Relief | 1 |
| 49 | 14153 | 14153 | Micro Switch | 1 |
| 50 | 16405 | 16405 | Collar Insulation | 1 |
| 51 | 20023 | 20488 | Starter Collar | 1 |
| 52 | 20027 | 20027 | Brick Liner Retainer | 2 |
| 53 | 20042 | 20042 | Air Kit Cover | 1 |
| 54 | 20088 | 20088 | Door Stop | 1 |
| 55 | 20089 | 20089 | Pivot Clip | 2 |
| 56 | 20090 | 20090 | Spring Clip | 2 |
| 57 | 20280 | 20280 | Top Spacer | 4 |
| 58 | 21171 | 21171 | Gas Knockout Cover | 4 |
| 59 | 21379 | 24460 | Gas Conduit | 1 |
| 60 | 21380 | — | Gas Conduit | 1 |
| 61 | 22912 | 22924 | Draft Diverter | 1 |
| 62 | 24353 | 24353 | Box Assembly | 1 |
| 63 | 11165 | 11165 | Screw, #10x5/8 Mod. Tr. Blk. Ox | 2 |
| **PARTS AVAILABLE NOT SHOWN** | | | | |
| | 901155-01 | 901155-01 | Vermiculite Bag | 1 |
| | 901156-01 | 901156-01 | Pan Material | 1 |
| | 901157-01 | 901157-01 | Lava Rock | 1 |
| | 22180 | 22180 | Wall Switch Kit | 1 |

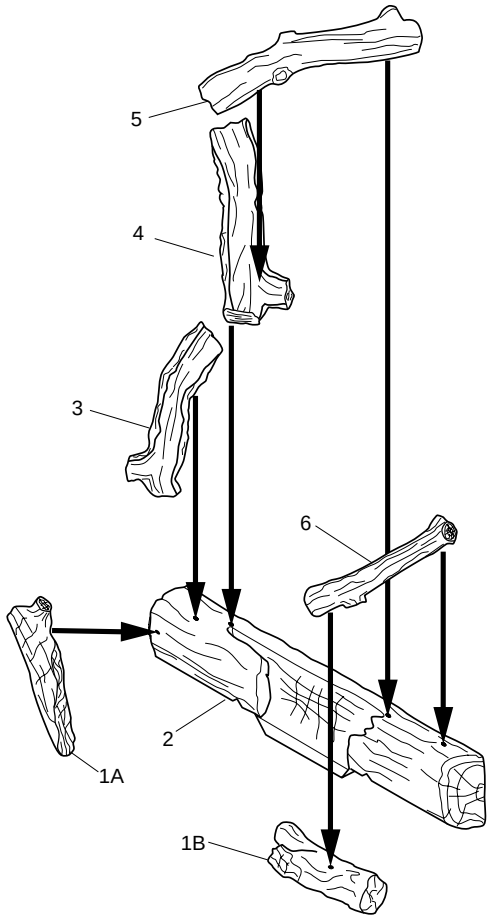
# ILLUSTRATED PARTS BREAKDOWN

## LOGS FOR M36(B,H), M42(B,H), VM36(B,H) AND VM42(B,H) MODELS




### Logset for M36(B, H)/VM36(B, H) Models

| KEY NO. | PART NUMBER | DESCRIPTION | QTY. |
|---|---|---|---|
| - | 107999-01 | Log Set | |
| 1 | 108724-01 | Right Front 9" Split Log | 1 |
| 2 | 901098-01 | Rear Log | 1 |
| 3 | 108720-01 | Top Right Log - 11 3/4" | 1 |
| 4 | 108721-01 | Top Right Log - 16" | 1 |
| 5 | 108722-01 | Top Left Log - 13 1/2" Y-Log | 1 |
| 6 | 108723-01 | Top Left Log - 11" | 1 |




### Logset for M42(B, H)/VM42(B, H) Models

| KEY NO. | PART NUMBER | DESCRIPTION | QTY. |
|---|---|---|---|
| - | 107999-02 | Log Set | |
| 1A | 108723-01 | Left Front Log - 11" | 1 |
| 1B | 108839-01 | Right Front Log - 15 3/4" Round | 1 |
| 2 | 901098-02 | Rear Log | 1 |
| 3 | 108722-01 | Top Left Log - 13 1/2" Y-Log | 1 |
| 4 | 108838-01 | Inside Top Left Log - 15 3/4" Split | 1 |
| 5 | 108721-01 | Inside Top Right Log - 16" | 1 |
| 6 | 108720-01 | Top Right Log - 11 3/4" | 1 |

# ACCESSORIES

***Notice:*** **All accessories may not be available for all fireplace models.**

Purchase these firebox accessories from your local dealer. If they can not supply these accessories, call DESA International's Sales Department at 1-866-672-6040 for information. You can also write -to the address listed on the back page of this manual.

## AIR KIT AK4 -

Optional kit helps offset the negative pressure often existing in today's tightly constructed homes.

## REMOTE CONTROL KITS

**RC -** Standard On/Off Millivolt Remote Control Kit
**GHRC** - Hand-Held Remote Control Kit
**GWMT1** - Wall-Mount Remote Control Kit

## PROPANE CONVERSION KITS

**PCBM-36 -** Propane Conversion Kit for 36" B-Vent Millivolt Fireplace
**PCBM-42 -** Propane Conversion Kit for 42" B-Vent Millivolt Fireplace

## EXTRUDED ALUMINUM BI-FOLD GLASS DOORS

**BD36 -** 36" Black Finish
**BD36B -** 36" Brushed Brass Finish
**BD36P -** 36" Platinum Finish
**BD42 -** 42" Black Finish
**BD42B -** 42" Brushed Brass Finish
**BD42P -** 42" Platinum Finish

## BRICK LINER

### (For M36(B,H) and M42(B,H)

**BL36 -** 36" Refractory Standard Brick Liner Kit
**BL42 -** 42" Refractory Standard Brick Liner Kit
**BL36H -** 36" Refractory Herringbone Brick Liner Kit
**BL42H -** 42" Refractory Herringbone Brick Liner Kit

### (For VM36(B,H) and VM42(B,H)

**BL36S -** 36" Refractory Standard Brick Liner Kit
**BL42S -** 42" Refractory Standard Brick Liner Kit
**BL36HS -** 36" Refractory Herringbone Brick Liner Kit
**BL42HS -** 42" Refractory Herringbone Brick Liner Kit

## BLOWER KIT

**BK -** Squirrel Cage Blower With Speed Control
**BK3E -** Triple Fan Blower System

## PERIMETER TRIM

**PT36 -** 36" Perimeter Trim - Black
**PT36B -** 36" Perimeter Trim - Brushed Brass
**PT36PB -** 36" Perimeter Trim - Polished Brass
**PT36P -** 36" Perimeter Trim - Platinum
**PT42 -** 42" Perimeter Trim - Black
**PT42B -** 42" Perimeter Trim - Brushed Brass
**PT42PB -** 42" Perimeter Trim - Polished Brass
**PT42P -** 42" Perimeter Trim - Platinum

## LOUVER TRIM (Rolled Louvers Only)

**LT36B -** 36" Louver Trim Kit - Brushed Brass
**LT36P -** 36" Louver Trim Kit - Platinum
**LT36PB -** 36" Louver Trim Kit for VM36(B,H) - Polished Brass
**LT42B -** 42" Louver Trim Kit - Brushed Brass
**LT42P -** 42" Louver Trim Kit - Platinum
**LT36PB -** 42" Louver Trim Kit for VM42(B,H) - Polished Brass

## FACE/LOUVER PANEL KITS

**SP36, SP42 -** Smooth Faced Panel Kit- Black
**SL36, SL42 -** Stamped Louver Panel Kit- Black
**RL36, RL42 -** Rolled Louver Kit- Black
**FP36, FP42 -** Filigree Panel Kit- Black
**FP36B, FP42B -** Filigree Panel Kit- Brushed Brass
**FP36P, FP42P -** Filigree Panel Kit- Platinum
**FP36PB, FP42PB -** Filigree Panel Kit- Polished Brass

# WARRANTY INFORMATION

## KEEP THIS WARRANTY

Model _____

Serial No. _____

Date Purchased _____

Always specify model and serial numbers when communicating with the factory.

We reserve the right to amend these specifications at any time without notice. The only warranty applicable is our standard written warranty. We make no other warranty, expressed or implied.

## LIMITED WARRANTY B-VENT FIREPLACE

DESA International warrants this product to be free from defects in materials and components for four (4) years from the date of first purchase, provided that the product has been properly installed, operated and maintained in accordance with all applicable instructions. To make a claim under this warranty the Bill of Sale or cancelled check must be presented.

This warranty is extended only to the original retail purchaser. This warranty covers the cost of part(s) required to restore this heater to proper operating condition and an allowance for labor when provided by a DESA Authorized Service Center. Warranty part(s) MUST be obtained through authorized dealers of this product and/or DESA International who will provide original factory replacement parts. Failure to use original factory replacement parts voids this warranty. The heater MUST be installed by a qualified installer in accordance with all local codes and instructions furnished with the unit.

This warranty does not apply to parts that are not in original condition because of normal wear and tear, or parts that fail or become damaged as a result of misuse, accidents, lack of proper maintenance or defects caused by improper installation. Travel, diagnostic cost, labor, transportation and any and all such other costs related to repairing a defective heater will be the responsibility of the owner.

TO THE FULL EXTENT ALLOWED BY THE LAW OF THE JURISDICTION THAT GOVERNS THE SALE OF THE PRODUCT; THIS EXPRESS WARRANTY EXCLUDES ANY AND ALL OTHER EXPRESSED WARRANTIES AND LIMITS THE DURATION OF ANY AND ALL IMPLIED WARRANTIES, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE TO FOUR (4) YEARS ON ALL COMPONENTS FROM THE DATE OF FIRST PURCHASE; AND DESA INTERNATIONAL'S LIABILITY IS HEREBY LIMITED TO THE PURCHASE PRICE OF THE PRODUCT AND DESA INTERNATIONAL SHALL NOT BE LIABLE FOR ANY OTHER DAMAGES WHATSOEVER INCLUDING INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES.

Some states do not allow a limitation on how long an implied warranty lasts or an exclusion or limitation of incidental or consequential damages, so the above limitation on implied warranties, or exclusion or limitation on damages may not apply to you.

This warranty gives you specific legal rights, and you may also have other rights that vary from state to state.

For information about this warranty write:

DESA™ INTERNATIONAL
2701 Industrial Drive
P.O. Box 90004
Bowling Green, KY 42102-9004
www.desatech.com

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NOT A UPC

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